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VALUATION OF THE MILITARY RETIREMENT SYSTEM

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DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

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INTRODUCTION

The military retirement system is really three separate but interrelated noncontributory unfunded systems: nondisability retirement from active service, reserve nondisability retirement, and disability retirement. All plans are defined benefit plans which are increased after retirement to fully reflect changes in the Consumer Price Index. A detailed description of the military retirement system is contained in Appendix B.

Currently, the Service Secretaries approve voluntary nondisability retirement for personnel upon credit of at least 20 years of service at any age. The retiree from active service receives an immediate annuity calculated as 2 1/2% of base pay for each year of creditable service, subject to a maximum of 75% of base pay. Base pay is equal to final basic pay if the retiree first became a member of the Armed Services before 8 September 1980. For those new members after that date, base pay equals the average of the highest 36 months of pay. A member has no vested right in the retirement system until the point of retirement eligibility.

Reservists who have served 20 or more years on active duty may be retired under the same criteria and authority as regular personnel. All other drill reservists who complete 20 creditable years for retirement purposes (at least 50 points during an anniversary year must be earned to be a creditable year) may retire at age 60. The annuity at 60 is determined by multiplying (base pay) by (the total number of accumulated points) by (2 1/2%) and dividing by 360.

In disability retirement the member receives base pay multiplied by the larger of (1) 2 1/2% times years of service, or (2) percent of disability. The benefit cannot be more than 75% of base pay.

On 30 September 1980 there were 2 million active duty regular and reserve personnel, .8 million selected drill reservists, 1.1 million retired nondisability annuitants, .2 million disability annuitants, and 67 thousand survivor benefit families in the military retirement system. Fiscal Year 1980 retired appropriation outlays totaled $11.9 billion, which was 56.9% of the amount paid in basic pay and 8.97% of the Department of Defense's military expenditures. Ten years earlier, retirement only totaled 3.7% of military costs. The most common age at retirement from active duty is 43 for officers and 39 for enlistees. Excluding reserve retirees, in September of 1980 the average gross monthly annuity for all nondisabled officers was $1,676 and nondisabled enlistees averaged $728 a month.

This is a valuation of the military retirement system as of 30 September 1980. Valuation results show an entry-age normal cost of 46% of basic payroll. Present value of future benefits total $523 billion resulting in an entry-age normal cost unfunded liability of $431 billion. The present value of accumulated plan benefits is $349 billion. The cost of the present pay-as-you-go method will ultimately level out at 54% of basic payroll. All liabilities relate to the Department of Defense retired appropriation only.

HISTORY OF MILITARY RETIREMENT AND RETIRED PAY ADJUSTMENTS

The evolution of the military retirement system has been guided by four principle motivations: (1) to provide for members who are old or disabled, (2) to help maintain a competitive employment position for the military, (3) to keep promotion opportunities open to young and able members, and (4) to avoid excessive costs. Additionally, this retirement system exists primarily to complement the management objectives of the active force. It is a major management tool for the active force and an element of the military compensation system.

Provisions for the maintenance of disabled military members date to colonial days. The Pilgrims at Plymouth provided in 1636 that any man sent forth as a soldier and returned maimed should be maintained by the colony during his life. In order to obtain enlistments in military expeditions against the Indians, the colonies promised to care for those who were disabled and had no means of earning a livelihood as well as providing aid for the indigent families of those fallen in conflict. Some of these precedents were continued in the first national pension law of August 26, 1776, which promised half pay for life, or during disability, to the disabled. After the Revolutionary War, a full disability pension for a noncommissioned officer or private soldier was fixed at five dollars per month, with commissioned officers being paid at one-half of their monthly pay. Initially, the States administered disability pensions. However, in 1790, the Secretary of War became the principal pension administrator. In 1805, disability pensions were extended to those who received wounds in military service which subsequently became disabling.

Pensions based on service by itself were more controversial. Annuities of half pay for life had been promised in 1780 by Congress for officers who served to the end of the War. However, the resulting claims were initially settled for less than full value and with a considerable amount of controversy. As the number of veterans declined, and the treasury increased, Congress became more generous. In 1818, an act was passed providing relief to Revolutionary War veterans in need. By 1832, it became full pay for life, regardless of need. In 1836, widows were included. This same pattern was followed for service pensions for subsequent wars. However, each war was treated separately.

In 1849, the Bureau of Pensions was transferred to the newly established Department of the Interior, where it was to remain until the Veterans Administration was created in 1930. In 1855, authorization was given for involuntary separation with partial pay of Navy officers adjudged incapable but

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1/ Sections of this are excerpted from (1) Defense Manpower Commission Staff Studies, Volume V, U.S. Government Printing Office, 1976 and (2) Military Compensation Background Papers, Third Quadrenial Review of Military Compensation, U.S. Government Printing Office, 1976.

2/ For a fuller discussion of the early history of military pensions see History of Military Pension Legislation in the United States, William H. Glasson, AMS Press, New York, N.Y. 1968.

not necessarily disabled. The outbreak of the Civil War brought further changes when it became necessary to retire older officers no longer fit for field duty. The vehicle was the Act of 3 August 1861, the first major nondisability retirement act, which provided for the voluntary retirement of regular officers of all branches of service after 40 years of duty, at the discretion of the President. Subsequent Acts in 1861 and 1862 provided for involuntary retirements for age or years of service.

The 1861 act also established a military disability retirement system that covered the regular officers of all branches of Service. Army and Marine Corps officers were to be paid an amount equal to their "pay proper" plus four rations. Navy officers were paid slightly more. The Act of 2 March 1867 authorized disability retirement for enlisted personnel of the Navy and Marine Corps.

Congress established two enduring retirement principles while reducing forces to a peacetime basis in 1870. The first permitted voluntary retirement of officers after 30 years of service upon approval by the President, and the second fixed retired pay at 75% of pay of the officer's grade. The 75% applied to Army and Marine Corps officers, both disabled and nondisabled, and was extended to Navy officers in 1873.

In 1885, the first nondisability retirement law for Army and Marine Corps enlistees was enacted. Paralleling the officer retirement laws, it provided for voluntary retirement at 30 years of service with 75% of pay of the grade in which retired plus an allowance in lieu of quarters, fuel, and light. The law was extended to the Navy in 1899.

By the middle of World War I, the limit on the number of officers who could be placed on the retired list was causing promotion stagnation problems in the Navy. To alleviate the problem, Congress in 1916 established selection boards for promotion to Rear Admiral, Captain, and Commander on the basis of age-in-grade. (Service-in-grade replaced age-in-grade in 1926.) Those officers not selected for promotion were retired at 2 1/2% of pay per year of service, not to exceed 75% of pay. This was the first recognition of length of service as well as grade in computation of retired pay.

The Act of 1916 also created the Fleet Naval Reserve, to provide a pool of experienced personnel who could be recalled to active duty in an emergency While technically different than retirement, the practical effect was that it was possible for enlistees of the Navy and Marine Corps to "retire" with as little as 16 years of service (raised to 20 in 1925).

By 1938, the Navy was again experiencing promotion stagnation problems caused by the large influx of officers in the World War I years. Almost all of these officers were in the same age and years of service groups. To remedy the situation, Congress extended the selection board process to all grades above Lieutenant (junior grade), set limits on years of service for Lieutenant Commanders through Captains, and provided for voluntary retirement at 20 years of service at the discretion of the President.

Following World War II, allegations of unfairness, inequity, and inefficiency in the existing disability retirement system became extensive. At this point, compensation for disabled military had evolved into the following:

	Army and Air Force	Navy and Marine Corps
Regular Officers	Military Disability Retired Pay - 75% of Base and Longevity Pay	Military Disability Retired Pay - 75% of Base and Longevity Pay
Nonregular Officers	Veterans Administration "Retirement" Pay - 75% of Base and Longevity Pay	Same as Regular Officers
Enlisted Personnel, 20 or More Years' Service	Military Disability Retired Pay - 75% of 6-months' Average Base and Longevity Pay	Military Disability Retired Pay - 50% of Base and Longevity Pay
Enlisted Personnel, Less Than 20 Years' Service	Veterans Administration Disability Compensation based on degree of disability	Veterans Administration Disability Compensation based on degree of disability

NOTE: Any member entitled to military retired pay could waive all or part of such pay and elect in its place any VA disability compensation based on degree of disability to which he was entitled.

A new system for disability retirement was created by the Career Compensation Act of 1949. Under this system all disabilities had to be rated under the standard schedule of rating disabilities in use by the Veterans Administration, and the resultant ratings became a factor in disability retired pay entitlement and taxability. The new system covered officer and enlisted personnel of both the Regular and Reserve components, and it authorized temporary as well as permanent disability retirements. The disability retirement system remains basically unchanged from the way it was enacted in 1949.

Meanwhile, the Officer Personnel Act of 1947 brought the Army and Air Force under a selection process similar to the Navy system. It also provided that those officers who failed promotion and were not eligible to retire would receive severance pay of two months' pay per year of service, not to exceed two years' pay.

Standardized nondisability retirement laws for all Services were brought about by the Army and Air Force Vitalization Act of 1948. The Act established 20 years as the minimum requirement for voluntary retirement, thereby placing the Army and Air Force on a par with the Navy. It also provided for the removal of substandard officers with severance pay equal to one month's pay per year of service, not to exceed one year's pay.

Prior to 1958, retired pay was generally increased in direct proportion to changes in active duty pay. The practice was discontinued with the Act of May 1958, when it was realized that a single 6% cost-of-living increase would cost only $35 million, as opposed to $65 million for linking the retired pay to active duty pay. The 6% approximated the increase in the cost-of-living since 1955 when retired pay was last increased.

In 1963, a permanent system of increasing retired pay, based on a formula geared to increases in the cost-of-living, was adopted. This system granted cost-of-living increases whenever the Consumer Price Index (CPI) went up at least 3% and remained up for three months. The benefit increase was equal to the percentage rise in the CPI plus 1%. The 1% was not added to increases before 1969.

Effective March 1977, cost-of-living adjustments were scheduled to occur every six months, on March 1st and September 1st, to be reflected in checks issued those months. The cost-of-living increase effective 1 March is computed by calculating the percentage increase (adjusted to the nearest 1/10 of 1%) in the CPI from the previous June to the previous December. Similarly, the cost-of-living increase effective 1 September is obtained by calculating the percentage increase in the June CPI over the CPI from the previous December In August 1981, this was changed to a once-a-year cost-of-living increase by eliminating the September increase. This change will save approximately $400 million in FY82 in the military retired pay appropriation. Annual cost-of-living increases will be given in March of each year based on the increase in the CPI between the two previous December CPI's. Retired pay increases, from 1958 to the present time, are shown in Table I.

FUNDING METHOD

Prior to 1935 the Navy had a pension fund (on a nonactuarial basis) which provided for payments to persons retired for disability whenever there was a sufficient amount in the fund. Other retired pay was paid directly from appropriations, and when the fund was insufficient, the disability retired pay was also paid from appropriations. The income to the fund consisted of the government's share of the proceeds from the sale of enemy or pirate ships captured by the Navy, and from interest received on fund investments. This fund was abolished in 1935, and since that time the military retirement system has been entirely on an unfunded or 'pay-as-you-go' basis. This valuation will show the unfunded liability under this funding method, which is just the present value of future benefits, as well as the unfunded liability under an entry-age normal cost funding method.

VALUATION DATA AND PROCEDURE

The valuation input data was abstracted from files maintained at the Defense Manpower Data Center (DMDC). Retiree and survivor data came from official files submitted by the Service Finance Centers (Army, Navy, Marines, and Air Force) semiannually. Reserve data was obtained from the Reserve Component Common Personnel Data System (RCCPDS), the official source for all Reserve strengths and statistics. Active duty data came from files provided quarterly by the four military personnel centers.

Table I

Military Retired Pay Increases Since 1 June 1958

Date of Increase	Percentage Increase	Cumulative
6/1/58	6.0	6.0
10/1/63	5.0	11.3
9/1/65	4.4	16.2
12/1/66	3.7	20.5
4/1/68	3.9	25.2
2/1/69	4.0	30.2
11/1/69	5.3	37.1
8/1/70	5.6	44.8
6/1/71	4.5	51.3
7/1/72	4.8	58.6
7/1/73	6.1	68.2
1/1/74	5.5	77.5
7/1/74	6.3	88.7
1/1/75	7.3	102.4
8/1/75	5.1	112.8
3/1/76	5.4	124.3
3/1/77	4.8	135.0
9/1/77	4.3	145.1
3/1/78	2.4	151.0
9/1/78	4.9	163.3
3/1/79	3.9	173.6
9/1/79	6.9	192.4
3/1/80	6.0	210.0
9/1/80	7.7	233.9
3/1/81	4.4	248.6

The files were aggregated and edited, disregarding invalid data. Detailed comptroller totals were used on all specific areas of data to bring the numbers and dollar amounts on the edited file up to actual size. The blow up figure was less than .5% for retirees and .1% for actives duty personnel. The only area that could not be matched to official DoD figures is the number of surviving families. This will be resolved in the future. The total of the survivor annuities was matched to actual payments.

Dollars amounts included the September CPI increase for retirees and annuitants as well as the 1 October pay raise for active duty and reserve personnel. These totals are summarized below:

Table II

Initial Accounting Figures as of 30 September 1980
($ in millions - basic pay includes October 1st increase)

Total Active Duty Personnel	2,049,526
Total Monthly Basic Pay	$ 1,821
Total Selected Drill Reservists	838,203
Total Monthly Basic Pay	$ 140
Total Number of Nondisability Retirees	1,113,429
Total Monthly Retired Pay	$ 977
Total Number of Disability Retirees	151,196
Total Monthly Retired Pay	$ 108
Total Number of Surviving Families	67,143
Total Monthly Survivor Annuities	$ 23

Summaries of active duty and retiree valuation data can be found in Appendix C. Detailed data of all populations in the valuation is available upon request.

The seriatim method was used in all phases of the valuation including active, retired, and survivor segments. A model was developed incorporating all parts of the military retirement system, including the drill reservists. This captured future liabilities for those members who left active duty and later joined the reserves to vest past retirement credits.

An entry-age normal cost percentage was developed by dividing the present value of future benefits by the present value of future salaries of a new entrant group starting their careers on the valuation date. New entrant models were created for drill reservists and active duty personnel using FY80 experience. The models are essentially arrays indicating what percentage of people enter at each age and category. Since there were two separate models, the relative size of the number of new entrants used in each category was carefully set. Appendix A contains the active duty new entrant model.

The unfunded liability was defined as the present value of future benefits minus the present value of future normal costs for all those currently in the system. This includes present active duty personnel, drill reservists, retirees, and survivors, as well as future retirees and future survivors resulting from this group.

ECONOMIC AND OTHER ACTUARIAL ASSUMPTIONS

The present values shown herein have been determined using a 5% rate of inflation assumption set by the Office of Management and Budget. The other economic assumptions, 5.5% for general salary scale increases (not including merit and promotion) and 6% for investment return were selected to be consistent with the 0.5% and 1.0% differentials used by the Board of Actuaries of the Civil Service Retirement System. The Board's differentials were based on a study of real salary growth for Federal employees and real earnings of Federal securities. The following historical table was analyzed by the Board:

Table III

Historic Economic Assumption Analysis
(In Percent)

	1950-1959	1960-1969	1970-1978	1960-1978	1950-1978
1. Average annual increase in Consumer Price Index	2.2	2.5	6.6	4.4	3.7
2. Average annual general schedule pay increases	2.8	4.7	5.6	5.1	4.3
3. Average annual yield on long-term US securities	2.6	4.6	7.1	5.8	4.7
4. Real salary growth = (2)-(1)	.6	2.2	(1.0)	.7	.6
5. Real yield = (3)-(1)	.4	2.1	.5	1.4	1.0
6. Yield-salary growth = (5)-(4)	(.2)	(.1)	1.5	.7	.4

The long term nature of pension liabilities caused the Board to hesitate to overreact to current high market yields. The 1950 to 1978 experience was used to moderate the effect of typical short-term trends. Future military salary scale increases and the theoretical return on investments of a military retirement fund will be similar to the experience of the Civil Service System. Since the military retirement system is fully indexed, the liabilities vary only slightly for sets of economic assumptions with the same differentials.

All new military specific death and decrement rates were created in 1980 using current experience. The rate creation process is discussed elsewhere in this text and the rate tables are in Appendix A.

VALUATION RESULTS

Table IV summarizes the normal cost findings. The normal cost as a percent of payroll for the system as a whole is 46%. Separately, officers have a normal cost of 67% and enlistees 38% of basic pay. These figures contain active duty as well as selected drill reservists in the basic pay figures. The retired pay figures include reserve and active duty retirees as do the surviving family annuities. The detailed projections indicated that for a group of new entrants into the military, only 12% ever become eligible for nondisability retirement. Only 36% of new officers and 11% of new enlisteds attain 20 years of service.

Table IV

Normal Cost Analysis and Detail
(As Percent of Payroll)

Nondisability Benefits	42
Disability Benefits	3
Survivor Benefits	1
Total Force	46%

Note: All entries in this table include deductions for survivor benefit premiums.

Table V summarizes the total present value of future pay and benefits of $523.3 billion as well as the entry-age normal cost unfunded liability of $431.1 billion. If an accrual accounting system had been installed as of 30 September 1980, whereby the normal cost would be placed in a fund annually, the fund would also need this $431.1 billion lump sum payment to pay future benefits. An amortization schedule would be set up to make payments on the $431.1 billion over 30 or more years.

One measure of the funding of a retirement system is the value of benefits earned to the date of the valuation. As shown in Table VI, the present value of accumulated plan benefits as of 30 September 1980 was $307 billion.

Accumulated plan benefits are those future periodic payments that are attributable under the Plan's provisions to the service that Armed Service personnel have rendered. Accumulated plan benefits include benefits expected to be paid to (a) retired military or their beneficiaries, (b) current beneficiaries, (c) present active duty personnel and nonretired reservists or their beneficiaries. Benefits payable under all circumstances (retirement, disability, and survivor) are included to the extent they are deemed attributable to service rendered prior to the valuation date. No future salary increases are used but annuities are increased in line with the post-retirement inflation provision.

The actuarial present value of accumulated plan benefits is that amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for

Table V

Actuarial Liability
As of September 30, 1980
($ in billions)

Present Value of Future Basic Pay	$ 199.5
Active Duty:	$ 187.5
Regular Officers	55.6
Nonregular Officers	16.5
Regular Enlisteds	112.8
Nonregular Enlisteds	2.6
Selected Reservists:	$ 12.0
Officers	3.5
Enlisteds	8.5
Present Value of Future Benefits	$ 523.3
Retirees:	$ 495.4
Nondisabled Officers	217.1
Nondisabled Enlisteds	248.0
Disabled Officers	15.4
Disabled Enlisteds	14.9
Surviving Families	$ 27.9
SBP	26.0
RCSBP	.4
Minimum Income	.1
DIC	.3
RSFPP	1.1
Normal Cost %	46.2
Pay-As-You-Go Liability	$ 523.3
Present Value of Future Normal Costs	$ 92.2
Entry Age Normal Cost Liability	$ 431.1
Fund Balance	0.0
Pay-As-You-Go Unfunded Liability	$ 523.3
Entry-Age Normal Cost Unfunded Liability	$ 431.1

interest) and the probability of payment (by means of decrements such as for death, disability, withdrawal, or retirement) between the valuation date and the expected date of payment. The actuarial assumptions are based on the presumption that the Plan will continue. Were the Plan to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits.

A nonretired vested participant is defined as an active duty member with over 20 years of service creditable toward retirement. Table VI summarizes these benefits.

Table VI

Accumulated Plan Benefits
As of 30 September 1980
($ in billions)

Present Value of Future Benefits	$348.9
Retirees:	$325.8
Nondisabled Officers	141.0
Nondisabled Enlisted	160.5
Disabled Officers	12.9
Disabled Enlisteds	11.4
Surviving Families:	$ 23.1
SBP	21.4
RCSBP	.3
Minimum Income	.1
DIC	.2
RSFPP	1.1
Actuarial Present Value of Vested Benefits	$307.2
Participants Currently Receiving Payments	$261.6
Other Vested Participants	45.6
Actuarial Present Value of Non-Vested Benefits	$ 41.7

Assuming a level active duty force, total basic pay and retired appropriation outlays are projected 75 years into the future in Table VII. The figures are placed into perspective by the outlays over payroll ratios. It should be noted that this ratio peaks at 65% in the year 2000 and then drops to 54% in 2040 where it remains level. This ultimate 54% should be compared to the ultimate 46% under a funded entry-age normal cost method. A good argument for remaining unfunded could be made with only an 8% difference in ultimate budget outlays. The economic assumptions used in the projection are indicated on the bottom of Table VII. Short-term assumptions were smoothed into long-term assumptions after 5 years.

Table VII

Total Past and Projected Basic Pay and Retired Appropriation Outlays*
($ in billions)

Fiscal Year	Total Basic Pay	Total Retired Appropriation Outlays	Outlays/ Payroll
1980	$ 20.9	$ 11.9	0.5694
**1981	23.5	13.9	0.5924
1982	26.8	15.6	0.5814
1983	29.3	17.2	0.5888
1984	31.6	18.8	0.5943
1985	33.7	20.2	0.5985
1986	35.8	21.6	0.6020
1987	37.9	22.9	0.6061
1988	40.0	24.4	0.6106
1989	42.2	26.0	0.6157
1990	44.5	27.6	0.6200
1991	47.0	29.4	0.6242
1992	49.6	31.2	0.6286
1993	52.3	33.1	0.6320
1994	55.2	35.0	0.6343
1995	58.3	37.1	0.6362
1996	61.5	39.2	0.6381
1997	64.8	41.5	0.6407
1998	68.3	43.9	0.6430
1999	72.0	46.4	0.6442
2000	75.9	48.9	0.6451
2005	98.8	63.1	0.6391
2010	128.9	80.1	0.6211
2015	168.5	100.7	0.5973
2020	220.4	127.1	0.5769
2025	288.0	161.9	0.5620
2030	376.4	207.9	0.5522
2035	491.9	268.6	0.5461
2040	642.9	348.8	0.5426
2045	840.3	454.5	0.5409
2050	1098.2	593.6	0.5405
2055	1435.4	775.9	0.5406

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*Payroll projections include selected reserve and active duty basic pay, outlays include active duty and reserve retirements as well as survivor annuities

**Projected from this year on.

CPI Assumptions (Fiscal Year)			
1981:	.095	1984:	.062
1982:	.087	1985:	.055
1983:	.073	1986 on:	.050

Salary Assumptions (Fiscal Year)			
1982:	.143	1985:	.067
1983:	.092	1986:	.060
1984:	.078	1987 on:	.055

Table VIII

Military Retirement Appropriation Accrual Costs
($ in billions)

40 Year Amortization as % of Payroll

Year	Estimated* Payroll	Normal Cost	Payment on Unfunded	Total Accrual Cost	Total Estimated, Outlays	Added Cost of Accrual
1981	$ 23.5	$ 10.9	$ 11.86	$ 22.76	$ 13.9	$ 8.86
1982	26.8	12.4	12.51	24.91	15.6	9.31
1983	29.3	13.5	13.20	26.70	17.2	9.50
1984	31.6	14.6	13.93	28.53	18.8	9.73
1985	33.7	15.6	14.70	30.30	20.2	10.10
1986	35.8	16.5	15.51	32.01	21.6	10.41

50 Year Amortization as % of Payroll

Year	Estimated* Payroll	Normal Cost	Payment on Unfunded	Total Accrual Cost	Total Estimated Outlays	Added Cost of Accrual
1981	$ 23.5	$ 10.9	$ 9.70	$ 20.60	$ 13.9	$ 6.70
1982	26.8	12.4	10.23	22.63	15.6	7.03
1983	29.3	13.5	10.80	24.30	17.2	7.10
1984	31.6	14.6	11.39	25.99	18.8	7.19
1985	33.7	15.6	12.02	27.62	20.2	7.42
1986	35.8	16.5	12.68	29.18	21.6	7.58

60 Year Amortization as % of Payroll

Year	Estimated* Payroll	Normal Cost	Payment on Unfunded	Total Accrual Cost	Total Estimated Outlays	Added Cost of Accrual
1981	$ 23.5	$ 10.9	$ 8.27	$ 19.17	$ 13.9	$ 5.27
1982	26.8	12.4	8.72	21.12	15.6	5.52
1983	29.3	13.5	9.20	22.70	17.2	5.50
1984	31.6	14.6	9.71	24.31	18.8	5.51
1985	33.7	15.6	10.25	25.85	20.2	5.65
1986	35.8	16.5	10.81	27.31	21.6	5.71

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*Includes basic pay to active duty and selected reserves

Unfunded Liability 9/30/80 = $431.1 billion   Normal Cost = .462

ACCRUAL ACCOUNTING

The Department of Defense is sponsoring a legislative proposal that would essentially place the military retirement system on an entry-age normal cost funding method. The proposal calls for the normal cost, as well as a payment on the unfunded liability, to be placed into a fund each year. The method and length of amortization is not precisely defined.

Under an entry-age normal method, when salaries are assumed to increase, the normal cost is defined not as a level dollar amount payable each year, but as a level percentage of salary. This spreads the payments out so that the financial impact is a uniform percentage of salary in all years. Likewise, using level dollar amortization of the unfunded liability when annuities are tied to CPI and salary increases creates an early year financial burden and misunderstandinags of the true cost of the system. Amortization of the unfunded liability as a level percent of payroll is a more defensible approach. Table VIII shows the accrual cost associated with the normal cost of 46% and the unfunded liability of $431.1 billion for three different amortization periods, all as a level percent of payroll. The Fiscal Year 1981 costs range from $19 to $23 billion or $5 to $9 billion more than the current cost.

If the unfunded liability had been amortized over 40 years in equal dollar payments, the level annual payment would be $27 billion. This would have resulted in a total 1981 accrual cost of $37.9 billion or $24 billion over the actual outlays of $14 billion. This level of funding is not only unnecessary but misleading since the cost would drop rapidly to 46% of pay. The following table shows the cost of retirement as a percent of basic payroll under three scenarios; accrual costs with 40 year level amortization, accrual costs with 40 year amortization as a level percent of payroll, and the present pay-as-you-go unfunded method.

Table IX

Total Costs as a Percent of Basic Payroll

	Actual Cost With Level Amortization	Accrual Cost With Level % of Payroll Amortization	Present Pay-As-You-Go Cost
1981	161	97	50
1982	147	93	58
1983	138	91	59
1984	132	90	59
1985	126	90	60
1986	122	89	60
1990	107	89	62
1995	92	89	64
2000	82	89	65
2010	67	90	62
2020	46	46	58
2030	46	46	55
2040+	46	46	54

Column two varies slightly in the early years, since variable annual salary scale assumptions were used in the projection for the first five years, and level assumptions were used in amortization.

FY77-79 ACTIVE FORCE DECREMENT RATES

The active force decrement rates are based on experience from 1 July 1976 through 30 September 1979. Death rates were developed by age nearest birthday (16-60) for officers and enlistees separately. All other active decrement rates were developed by completed years of service (0-34) for each of four categories: regular officers, nonregular officers, regular enlisteds and nonregular enlisteds. These include rates for withdrawal, reentrance, nondisability retirement, temporary disability retirement, permanent disability retirement, and rates of transferring to each of the other three categories. Appendix A contains all rates.

The data were taken from Defense Manpower Data Center Active Force Master Files as of 30 September 1976, 1977, 1978 and 1979, and the associated Loss Transaction Files for FY77, FY78, FY79, and the transition quarter July - September 1976. The Active Master Files are created by each of the four Services at the end of the fiscal year and are sent to the Defense Manpower Data Center (DMDC) where they are maintained after a series of quality tests are passed. The data agree well with other published strength figures, as shown in Appendix B, Table I, and are believed to be of high quality. The Active Master Files exclude service academy cadets, reservists on active duty for training, Navy personnel attending Officer Candidate School, and Army personnel in certain classified occupations. The Loss Master Files also begin with magnetic tape submissions from the four Services. These are consolidated into fiscal year files by regrouping the loss transactions by fiscal year of the transaction dates.

In a few cases individuals are found on a year end file even though there is a loss record indicating they had left the Service before the year end. This carry over problem, 2900 cases in FY79, is caused by the Active Master File being "cut" at the end of the fiscal year before all transactions have been applied. A second problem in the Loss Master File is that some individuals are dropped from the Active Master File from one year to the next, even though no loss record appears. As shown in the Table X below, this problem is also small and is handled by an allocation procedure.

Table X

Summary of Losses* by Type of Loss
and Fiscal Year

	Fiscal	1977	Fiscal	1978	Fiscal	1979
Type of Loss**	Number	%	Number	%	Number	%
Temporary Disability Retirement	5,609	1.4	5,326	1.6	4,526	1.2
Permanent Disability Retirement	1,961	0.5	1,546	0.5	1,295	0.3
Nondisability Retirement	43,437	11.1	40,266	11.8	40,334	10.9
Death	2,290	0.6	2,495	0.7	2,197	0.7
Other	330,597	84.5	287,730	84.2	317,805	85.6
Unknown (no loss record)	7,518	1.9	4,206	1.2	4,920	1.3
TOTAL	391,412	100.0	341,571	100.0	371,077	100.0

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*A loss is defined as someone who is on the Active Master File at the end of one fiscal year but not the next.

**Type of loss is determined by linking an Active Master File loss to a loss record using Social Security Number.

The reasonableness of the loss codes on the Loss Master File was confirmed by following up FY77 losses with the Retired Master Files for FY77 and FY78. On the Retired Master Files, 99.9% of new nondisability retirees show up as do 98.4% of temporary disability retirements and 98.0% of permanent disability retirements. Only 72 Loss File deaths appeared on the Retiree File. These, however, are transaction entries and all but two of them have "death" given as a reason for termination of retired pay. The date of death, where given, corresponds to that given on the Loss Master File record.

Due to the above lag problems, the procedure was to define as a loss anyone who was on the Active Master File at the beginning of one fiscal year and not at the end of the year. The type of loss was then determined by a Social Security Number match with the Loss Master File.

In the event that no matching loss record could be found, the loss was prorated in proportion to other losses for persons in the same category. The categories are defined by officers/enlistees, and regular/nonregular, and by length of service or age, depending upon the rate being calculated. The cases not finding matching loss records amounted to 1.9% of all losses in FY77, 1.2% in FY78, and 1.3% in FY79. Examination of these cases uncovered no consistent pattern that would not adequately be dealt with by the allocation procedure utilized.

Because 92% of "other" losses with 20 years of service showed up on the Retiree File, it was decided to allocate these as if they were losses of an unknown type. Similarly, cases whose matching loss record indicated a nondisability retirement were treated using the unknown loss procedure if they had under 18 years of service at the beginning of the fiscal year. There were 765 such cases in FY77, 603 in FY78, and 338 in FY79.

Two types of active rates did not involve losses: the reentrance and transfer rates. Reentrants were defined as cases present on the Active Master File at the end of the fiscal year, but not the beginning, and which were not new entrants. Transfers were those cases which changed categories during the year and were still on active duty at year end.

Crude rates were created using combined data from the three fiscal years. The formulas used are given in Appendix D, Table II. These ungraduated rates were then smoothed using a Whittaker-Henderson type B graduation technique. In some cases, the smoothing was based upon second differences and in some cases third differences were used. Where there were discontinuities in the rates, the smoothing was broken between two segments. In places where graduation of the rates would not be likely to improve prediction, the ungraduated rates were used. A summary of where each technique was employed is given in Appendix D, Table III.

FY79-80 RETIREE DECREMENT RATES

The military retiree decrement rates are based upon experience from 1 October 1978 through 30 September 1980. These rates were created by age nearest birthday for officers and enlistees separately, and can be further subdivided by three types of retirement: nondisability, temporary disability, and permanent disability. Death rates were developed as well as rates for "other" losses. The "other" losses are primarily due to switches to Civil Service annuities and return to military service. For temporary disability retirees there is also a rate of transfer to permanent disability. Select temporary disability rates were created for each of the first five years of retirement. After the five year period it is no longer possible to be a temporary disability retiree so ultimate rates were unnecessary. Appendix A contains the individual rates.

The data for the rates were taken from Defense Manpower Data Center Retiree Files as of September 30 for the years 1978 through 1980. These files are created semiannually by the Finance Centers of the military Services, which have responsibility for sending monthly retired paychecks to military retirees. As indicated in Appendix E, Table I, the number of retirees in current pay status at the end of a fiscal year is practically equal to accounting figures supplied to the Office of the Assistant Secretary of Defense (Comptroller) by the Services. Minor differences exist due to different treatment of unknowns and different transactions having been applied to the basic records at the points when the DMDC and Comptroller submissions are created.

Any retiree who terminates from paid status during a fiscal year should be on the retiree file at the end of that fiscal year with a termination code indicating the type of termination. The rate development process started by matching two consecutive fiscal year end files by Social Security Number or, in the case of older retirees, by member Service number. As shown in Table XI, there were some cases with no follow-up record and others with no valid termination code indicating the type of termination. It was also possible for there to be an unknown grouping variable. All rates are specific for age, type of retirement, whether officer or enlisted, and, in the case of temporary disability retirees, years retired.

For rate development, if any of these needed grouping variables were unknown, the case was eliminated. As shown in Appendix E, Table II, age was the only grouping variable which was unknown in a substantial number of cases. This caused no serious problems since the outcomes for retirees with unknown age are very much like those of retirees with known age, as shown in Appendix E, Table III.

Where outcome was not ascertainable other procedures were needed. An independent source of the number of retiree deaths in a year was available from a monthly report sent to the Office of the Assistant Secretary of Defense (Comptroller). Treating unknown outcomes as deaths improved the fit between the DMDC and Comptroller death totals. With two exceptions, the unknown outcomes were treated as deaths for nondisability and permanent disability retirees. The resulting totals are compared in Appendix E, Table IV.

For the Army, allocations using a "hot deck" procedure yielded a better fit between the DMDC and Comptroller figures for deaths. The "hot deck" procedure has a result similar to prorating, but has the added advantage that distributional properties as well as means are preserved. The "hot deck" procedure treated an

Table XI

Summary of Cases With No Follow-up Record or an Invalid Termination Code for Retirees on File at the Beginning of Fiscal 1979 and 1980

Item	Temporarily Disabled Retirees		Permanently Disabled Retirees		Nondisability Retirees	
	FY79	FY80	FY79	FY80	FY79	FY80
Officers						
Cases on File at Beginning of FY's	1,175	1,064	57,803	56,650	317,251	332,266
Cases with No Follow-up Record	13	4	172	32	429	141
% Without Follow-up	1.1%	0.4%	0.3%	0.1%	1.3%	0.0%
Cases with Invalid Code	15	16	12	0	31	2
% with Invalid Codes	1.3%	1.5%	0.0%	0.0%	0.0%	0.0%
Cases with No Follow-up or Having Invalid Terminations Code as a % of All Terminations	5.7%	4.7%	10.0%	1.8%	7.9%	2.3%
Enlistees						
Cases on File at Beginning of FY's	11,262	10,237	83,638	84,343	721,490	743,862
Cases with No Follow-up Record	115	39	211	108	908	336
% Without Follow-up	1.0%	0.4%	0.3%	1.3%	1.3%	0.0%
Cases with Invalid Code	220	274	111	0	148	0
% with Invalid Codes	2.0%	2.7%	0.1%	0.0%	0.0%	0.0%
Cases with No Follow-up or Having Invalid Terminations Code as a % of All Terminations	6.7%	6.8%	7.8%	2.9%	8.9%	2.6%

unknown outcome identically to the preceding similar Army case of a retiree with a known termination. A case was considered similar if it had a termination other than death and had the same age, type of retirement, and officer/enlisted status.

The second exception where unknown outcomes were not treated as deaths was for FY79 Navy cases with a follow-up record but an invalid termination code. These cases were classified as "other losses" to remedy a known idiosyncrasy in the file.

With one exception, the unknown outcomes for temporary disability retirees were prorated to known outcomes within cells defined by age, years retired, and officer/enlisted status. Prior to allocation, data were first pooled for the two fiscal years. The exception was again for FY79 Navy retirees having a valid follow-up record, but an invalid termination code. These were treated as "other terminations," a category which includes return to active duty and Civil Service retirement. This procedure circumvented an idiosyncrasy of the FY79 file.

After allocation of unknowns, crude rates were created using the formulas shown in Appendix E, Table V. The decrement rates for nondisability and permanent disability retirees were developed using a Whittaker-Henderson graduation technique. For all rates, third order differences were used. Where death data were sparse, a linear projection of the logarithms of the graduated rates were used. The age ranges where projections were used are indicated in Appendix E, Table VI.

Besides death rates, a second retiree decrement rate was created which includes all losses other than deaths or Veterans Administration waivers. This rate was set to zero outside of certain age ranges.

For temporary disability retirees select decrement rates were needed. A rate was needed for transfer to permanent disability as well as rates for death and other losses. Although cell exposure was small it was still possible to use Whittaker-Henderson graduation in the age ranges where most losses occurred when developing transfer and loss rates. To provide rates outside these age ranges, the final graduation was extended or a reasonable value was substituted. The age ranges where Whittaker-Henderson graduation was performed are given in Appendix E, Table VII. Death rates for temporarily disabled were provided, basically by rescaling the permanent disability death rates, so that they yielded the observed number of deaths for each officer/enlisted, years retired combination. For enlistees who had been on the disability retired roles for less than three years, and officers who had been on the disability retired roles for less than two years, the rescaled death rates were ultimately used. For enlistees retired three or four years, the death rates were obtained by interpolating between rescaled rates for enlistees on the temporary disability retired roles for two years and for permanently disabled enlisted rates. For officers on the temporary disability retired roles for two, three, and four years, the following modifications were made. Death rates for officers disabled for three years was created by averaging the two, three and four year death rates. Death rates for officers temporarily disabled for two years were set midway between the rescaled one year rates and the newly created three year rates. Finally, death rates for officers temporarily disabled for four years were set midway between the newly created three year rate for officers and the death rate for permanently disabled officers.

ACTIVE AND RESERVE SCALES OF CAREER PAY INCREASES

The scale of career pay increases is used to indicate pay increases that may be expected in a typical serviceman's career. These are based upon cross-sectional data in two 30 September 1980 files. The active force scales utilized data taken from the Active Master File. The reserve scales used RCCPDS (Reserve Component Common Personnel Data System).

The active force Master File was first screened by age, length of active service, grade, branch of service, and regular/nonregular. Extensive editing resulted in a file 99.9% of the original size.

Basic pay was added to the data elements, using a table look-up by grade, years of service for pay, and for officers, whether or not they had completed four years as an enlistee. The 1 October 1980 pay table was used. Tabulations of persons and total pay were then created by branch of service, age nearest birthday, grade, and regular or nonregular status. Average pay was computed by collapsing the branch of service dimension entirely and collapsing the grade dimension to an officer/enlistee dichotomy. During this collapsing, weights were modified so that they summed to control totals by grade, branch of service, and regular/nonregular. An average pay grid by age and length of active service resulted for four categories of personnel; regular officers, nonregular officers, regular enlistees, and nonregular enlistees. For each of the four groups, average pay was then smoothed along diagonal elements, where age and length of service were increasing. The smoothing was done using a Whittaker-Henderson type B graduation, with either second or third differences, depending on the series. Due to the small number of cases below the diagonal, beginning with age 26 and length of service, 0 (i.e., age at entry over 26), the cases below this diagonal were moved up to that element in the diagonal having the same years of active service. This consolidation was accomplished prior to smoothing. After smoothing the smooth average pay on the diagonal was moved to elements below the diagonal. Also after the smoothing, all diagonals were rescaled so that the average pay along a diagonal was not affected by the smoothing. The result is the active force scale of career pay increases.

For the Reserves, pay data were not available. They were estimated using average grade in cells defined by officer/enlisted, age, and years of active service. Pay rates were looked-up, using the 1 October 1980 pay scale, and annual pay was estimated assuming 78 reserve points were earned per year. A point is earned for attending a drill or a day of summer camp, with 15 additional points per year being credited for membership in a reserve component.

The result of the preceding was a grid giving annual pay by officer/enlisted by age by years of active service. For each combination of officer/enlisted by years of active service the above results were smoothed along the dimension of increasing age. This smoothing was performed using a Whittaker-Henderson type B graduation with second differences. Where data were sparse, the results of the Whittaker-Henderson were subsequently smoothed using three-point moving averages along a dimension of increasing years of active service for a particular age and officer/enlisted combination. The result is the Reserve Force scale of career pay increases.

MISCELLANEOUS RATES

Besides the rates mentioned in the preceding sections, there were several additional rates needed for the valuation. Divorce rates are based upon census Report P-20, No. 297, which utilized data from the Current Population Survey of June 1975.

Remarriage rates, child termination rates, and survivor death rates were developed by the Office of Personnel Management, based upon the experience of Civil Service annuitants and their survivors. Because of the similarity of the program features, these were a reasonably good proxy for rates currently not available from Department of Defense data.

Reserve decrement rates are created for the selected reservists using the Reserve Component Common Personnel Data System (RCCPDS). Only one decrement rate was needed, the reserve total loss rate. However, separate rates were needed by officer/enlisted for a set of cells defined by age and years of active service. The denominator for each rate was the selected reservist as of 30 September 1979; for a numerator, those reservists no longer present on 30 September 1980. The quotient was the crude loss rate. The crude loss rates were then smoothed, using a Whittaker-Henderson type B graduation with second or third differences. The smoothing was performed along a dimension of increasing age, for persons who had completed a particular number of years of active service. Where data were sparse, the rates were also subsequently smoothed using 3-point moving averages along a dimension of increasing years of active service, for a particular age and officer/enlisted combination.

APPENDIX A

PERCENTAGE DISTRIBUTION OF NEW ENTRANTS (AGE NEAREST BIRTHDAY)

AGE	REGULAR OFFICERS	NONREGULAR OFFICERS	REGULAR ENLISTED	NONREGULAR ENLISTED	TOTAL
16	0.0	0.0	0.01097	0.00094	0.01191
17	0.0	0.0	0.18027	0.01047	0.19074
18	0.0	0.0	0.26480	0.01546	0.28026
19	0.00001	0.00002	0.17334	0.00746	0.18083
20	0.00015	0.00026	0.09298	0.00546	0.09885
21	0.00660	0.00568	0.05605	0.00346	0.07179
22	0.00587	0.00932	0.03770	0.00215	0.05504
23	0.00185	0.00625	0.02599	0.00147	0.03556
24	0.00036	0.00414	0.01799	0.00105	0.02354
25	0.00015	0.00368	0.01192	0.00069	0.01644
26	0.00007	0.00275	0.00818	0.00044	0.01144
27	0.00006	0.00177	0.00583	0.00033	0.00799
28	0.00004	0.00119	0.00352	0.00020	0.00495
29	0.00001	0.00094	0.00219	0.00017	0.00331
30	0.00001	0.00069	0.00148	0.00010	0.00228
31	0.0	0.00053	0.00108	0.00004	0.00165
32	0.0	0.00042	0.00065	0.00002	0.00109
33	0.0	0.00031	0.00055	0.00001	0.00087
34	0.0	0.00020	0.00041	0.00001	0.00062
35	0.0	0.00015	0.00009	0.00002	0.00026
36	0.0	0.00011	0.00001	0.0	0.00012
37	0.0	0.00009	0.0	0.0	0.00009
38	0.0	0.00007	0.0	0.0	0.00007
39	0.0	0.00006	0.0	0.0	0.00006
40	0.0	0.00005	0.0	0.0	0.00005
41	0.0	0.00004	0.0	0.0	0.00004
42	0.0	0.00002	0.0	0.0	0.00002
43	0.0	0.00002	0.0	0.0	0.00002
44	0.0	0.00002	0.0	0.0	0.00002
45	0.0	0.00001	0.0	0.0	0.00001
46	0.0	0.00002	0.0	0.0	0.00002
47	0.0	0.00002	0.0	0.0	0.00002
48	0.0	0.00001	0.0	0.0	0.00001
49	0.0	0.00001	0.0	0.0	0.00001
50	0.0	0.00001	0.0	0.0	0.00001
51	0.0	0.00001	0.0	0.0	0.00001
52	0.0	0.00001	0.0	0.0	0.00001
53	0.0	0.00001	0.0	0.0	0.00001
54	0.0	0.00001	0.0	0.0	0.00001
55	0.0	0.0	0.0	0.0	0.0
	0.01510	0.03890	0.89600	0.05000	1.00000

OFFICE OF THE ACTUARY - DMDC 1981

NONDISABILITY, TEMPORARY DISABILITY & PERMANENT DISABILITY RETIREMENT RATES

OFFICERS (BY COMPLETED YEARS OF SERVICE)

REGULAR OFFICERS				NONREGULAR OFFICERS			
SERVICE	NON DISABILITY	TEMP DISABILITY	PERM DISABILITY	SERVICE	NON DISABILITY	TEMP DISABILITY	PERM DISABILITY
0	0.0	0.00094	0.00015	0	0.0	0.00106	0.00016
1	0.0	0.00089	0.00016	1	0.0	0.00114	0.00018
2	0.0	0.00085	0.00016	2	0.0	0.00118	0.00020
3	0.0	0.00083	0.00017	3	0.0	0.00121	0.00022
4	0.0	0.00082	0.00018	4	0.0	0.00124	0.00026
5	0.0	0.00083	0.00020	5	0.0	0.00129	0.00031
6	0.0	0.00083	0.00022	6	0.0	0.00135	0.00037
7	0.0	0.00081	0.00026	7	0.0	0.00142	0.00047
8	0.0	0.00079	0.00029	8	0.0	0.00151	0.00057
9	0.0	0.00078	0.00035	9	0.0	0.00160	0.00069
10	0.0	0.00078	0.00041	10	0.0	0.00166	0.00080
11	0.0	0.00080	0.00046	11	0.0	0.00172	0.00091
12	0.0	0.00082	0.00049	12	0.0	0.00175	0.00102
13	0.0	0.00085	0.00049	13	0.0	0.00178	0.00112
14	0.0	0.00086	0.00045	14	0.0	0.00182	0.00123
15	0.0	0.00087	0.00041	15	0.0	0.00186	0.00134
16	0.0	0.00090	0.00037	16	0.0	0.00189	0.00146
17	0.0	0.00090	0.00090	17	0.0	0.00309	0.00309
18	0.00464	0.00086	0.00072	18	0.00727	0.00308	0.00289
19	0.21046	0.00232	0.00214	19	0.57059	0.00680	0.00781
20	0.20830	0.00283	0.00208	20	0.43296	0.00776	0.01009
21	0.16712	0.00301	0.00208	21	0.29829	0.00243	0.00398
22	0.14788	0.00314	0.00228	22	0.23592	0.00323	0.00233
23	0.14051	0.00311	0.00288	23	0.22997	0.00315	0.00383
24	0.13462	0.00313	0.00331	24	0.22543	0.00402	0.00543
25	0.18382	0.00333	0.00369	25	0.21295	0.00511	0.00702
26	0.18768	0.00398	0.00364	26	0.19879	0.00583	0.00898
27	0.20917	0.00463	0.00518	27	0.22840	0.00658	0.01142
28	0.23341	0.00551	0.00715	28	0.24823	0.00817	0.01500
29	0.41994	0.00664	0.01060	29	0.62818	0.01014	0.01983
30	0.39444	0.00763	0.01159	30	0.50818	0.01152	0.02570
31	0.36017	0.00844	0.00960	31	0.52398	0.01170	0.02954
32	0.36110	0.00921	0.00810	32	0.48598	0.01119	0.02898
33	0.33219	0.00986	0.00747	33	0.39144	0.01026	0.02462
34	1.00000	0.01046	0.00707	34	1.00000	0.00908	0.01786

EXAMPLE: NINE COMPLETED YEARS OF SERVICE COULD INCLUDE ANYTHING FROM 9.0 TO 9.999 YEARS OF SERVICE. THE ASSOCIATED RATE APPLIED TO THE NUMBER OF PEOPLE AT THE BEGINNING OF THE YEAR IN THE CATAGORY WILL PRODUCE THE EXPECTED NUMBER OF OCCURANCES DURING THE FOLLOWING YEAR.

OFFICE OF THE ACTUARY - DMDC 1981

NONDISABILITY, TEMPORARY DISABILITY & PERMANENT DISABILITY RETIREMENT RATES

ENLISTED (BY COMPLETED YEARS OF SERVICE)

REGULAR ENLISTED				NONREGULAR ENLISTED			
SER-VICE	NON DISA-BILITY	TEMP DISA-BILITY	PERM DISA-BILITY	SER-VICE	NON DISA-BILITY	TEMP DISA-BILITY	PERM DISA-BILITY
0	0.0	0.00228	0.00019	0	0.0	0.00721	0.00019
1	0.0	0.00299	0.00029	1	0.0	0.00355	0.00029
2	0.0	0.00310	0.00039	2	0.0	0.00410	0.00039
3	0.0	0.00334	0.00048	3	0.0	0.00412	0.00048
4	0.0	0.00277	0.00053	4	0.0	0.00370	0.00053
5	0.0	0.00253	0.00056	5	0.0	0.00332	0.00056
6	0.0	0.00236	0.00060	6	0.0	0.00310	0.00060
7	0.0	0.00235	0.00065	7	0.0	0.00320	0.00065
8	0.0	0.00224	0.00072	8	0.0	0.00350	0.00072
9	0.0	0.00222	0.00083	9	0.0	0.00369	0.00083
10	0.0	0.00211	0.00090	10	0.0	0.00388	0.00090
11	0.0	0.00218	0.00096	11	0.0	0.00410	0.00096
12	0.0	0.00220	0.00101	12	0.0	0.00446	0.00103
13	0.0	0.00231	0.00110	13	0.0	0.00488	0.00110
14	0.0	0.00229	0.00121	14	0.0	0.00533	0.00121
15	0.0	0.00230	0.00134	15	0.0	0.00576	0.00134
16	0.0	0.00236	0.00147	16	0.0	0.00624	0.00147
17	0.0	0.00413	0.00303	17	0.0	0.01730	0.00303
18	0.00730	0.00274	0.00184	18	0.32403	0.00273	0.00184
19	0.42718	0.01447	0.01131	19	0.58611	0.01447	0.01131
20	0.31528	0.01048	0.00705	20	0.51732	0.01048	0.00705
21	0.26144	0.00649	0.00486	21	0.44792	0.00649	0.00486
22	0.28250	0.00666	0.00495	22	0.39494	0.00666	0.00495
23	0.19764	0.00614	0.00471	23	0.19764	0.00614	0.00471
24	0.14142	0.00583	0.00507	24	0.14142	0.00583	0.00507
25	0.37065	0.00809	0.00687	25	0.37065	0.00809	0.00687
26	0.28566	0.01102	0.00877	26	0.28566	0.01102	0.00877
27	0.30325	0.01175	0.01038	27	0.30325	0.01175	0.01038
28	0.26810	0.01558	0.01351	28	0.26810	0.01558	0.01351
29	0.80602	0.02291	0.01985	29	0.80602	0.02291	0.01985
30	0.64363	0.02918	0.02717	30	0.64363	0.02918	0.02717
31	0.42377	0.03323	0.03273	31	0.42377	0.03323	0.03273
32	0.41221	0.03508	0.03707	32	0.41221	0.03508	0.03707
33	0.41689	0.03567	0.04074	33	0.41689	0.03567	0.04074
34	1.00000	0.03580	0.04302	34	1.00000	0.03580	0.04302

EXAMPLE: NINE COMPLETED YEARS OF SERVICE COULD INCLUDE ANYTHING FROM 9.0 TO 9.999 YEARS OF SERVICE. THE ASSOCIATED RATE APPLIED TO THE NUMBER OF PEOPLE AT THE BEGINNING OF THE YEAR IN THE CATAGORY WILL PRODUCE THE EXPECTED NUMBER OF OCCURANCES DURING THE FOLLOWING YEAR.

WITHDRAWAL, REENTRANT AND NET LOSS RATES FOR ACTIVE DUTY PERSONNEL

OFFICERS (BY COMPLETED YEARS OF SERVICE)

REGULAR OFFICERS				NONREGULAR OFFICERS			
SER-VICE	WITH-DRAWAL	RE-ENTRANT	NET LOSS	SER-VICE	WITH-DRAWAL	RE-ENTRANT	NET LOSS
0	0.00704	0.07379	-0.06675	0	0.03407	0.10550	-0.07143
1	0.00560	0.01469	-0.00909	1	0.16136	0.03228	0.12908
2	0.02358	0.00546	0.01812	2	0.14558	0.03891	0.10667
3	0.08289	0.00349	0.07940	3	0.17803	0.08257	0.09547
4	0.11718	0.00163	0.11555	4	0.12800	0.03665	0.09135
5	0.12104	0.00130	0.11974	5	0.14978	0.03017	0.11961
6	0.10413	0.00083	0.10330	6	0.13365	0.02250	0.11115
7	0.08586	0.00056	0.08530	7	0.10063	0.01853	0.08210
8	0.06126	0.00066	0.06060	8	0.08364	0.01978	0.06386
9	0.05600	0.00056	0.05544	9	0.06721	0.01733	0.04988
10	0.05263	0.00045	0.05218	10	0.07924	0.01470	0.06454
11	0.03578	0.00040	0.03538	11	0.11041	0.01410	0.09631
12	0.01976	0.00040	0.01936	12	0.06854	0.01579	0.05275
13	0.01678	0.00035	0.01643	13	0.03140	0.01027	0.02113
14	0.03243	0.00021	0.03222	14	0.02494	0.00917	0.01577
15	0.01050	0.00024	0.01026	15	0.03177	0.00917	0.02260
16	0.00446	0.00031	0.00415	16	0.05671	0.00744	0.04927
17	0.00296	0.00031	0.00265	17	0.02249	0.00784	0.01465
18	0.00134	0.00026	0.00108	18	0.00224	0.00652	-0.00428
19	0.0	0.00026	-0.00026	19	0.0	0.00389	-0.00389
20	0.0	0.00039	-0.00039	20	0.0	0.01421	-0.01421
21	0.0	0.00033	-0.00033	21	0.0	0.02151	-0.02151
22	0.0	0.00028	-0.00028	22	0.0	0.02870	-0.02870
23	0.0	0.00025	-0.00025	23	0.0	0.03402	-0.03402
24	0.0	0.00025	-0.00025	24	0.0	0.03696	-0.03696
25	0.0	0.00030	-0.00030	25	0.0	0.03482	-0.03482
26	0.0	0.00042	-0.00042	26	0.0	0.03125	-0.03125
27	0.0	0.00060	-0.00060	27	0.0	0.03063	-0.03063
28	0.0	0.00085	-0.00085	28	0.0	0.03844	-0.03844
29	0.0	0.00118	-0.00118	29	0.0	0.06591	-0.06591
30	0.0	0.00157	-0.00157	30	0.0	0.12048	-0.12048
31	0.0	0.00201	-0.00201	31	0.0	0.19597	-0.19597
32	0.0	0.00249	-0.00249	32	0.0	0.19700	-0.19700
33	0.0	0.00300	-0.00300	33	0.0	0.19800	-0.19800
34	0.0	0.0	0.0	34	0.0	0.0	0.0

EXAMPLE: NINE COMPLETED YEARS OF SERVICE COULD INCLUDE ANYTHING FROM 9.0 TO 9.999 YEARS OF SERVICE. THE ASSOCIATED RATE APPLIED TO THE NUMBER OF PEOPLE AT THE BEGINNING OF THE YEAR IN THE CATAGORY WILL PRODUCE THE EXPECTED NUMBER OF OCCURANCES DURING THE FOLLOWING YEAR.

OFFICE OF THE ACTUARY - DMDC 1981

WITHDRAWAL, REENTRANT AND NET LOSS RATES FOR ACTIVE DUTY PERSONNEL

ENLISTED (BY COMPLETED YEARS OF SERVICE)

REGULAR ENLISTED				NONREGULAR ENLISTED			
SERVICE	WITHDRAWAL	REENTRANT	NET LOSS	SERVICE	WITHDRAWAL	REENTRANT	NET LOSS
0	0.13600	0.01962	0.11638	0	0.18825	0.08523	0.10302
1	0.12562	0.01378	0.11184	1	0.32323	0.02059	0.30264
2	0.32484	0.01985	0.30499	2	0.67740	0.03451	0.64289
3	0.43697	0.02378	0.41319	3	0.34275	0.18497	0.15778
4	0.13473	0.00988	0.12485	4	0.20916	0.18543	0.02373
5	0.16858	0.00745	0.16113	5	0.18648	0.09599	0.09049
6	0.13950	0.00650	0.13300	6	0.18339	0.06859	0.11480
7	0.15469	0.00723	0.14746	7	0.14888	0.08436	0.06452
8	0.10294	0.00604	0.09690	8	0.11090	0.08648	0.02442
9	0.07812	0.00465	0.07347	9	0.07982	0.07806	0.00176
10	0.05532	0.00368	0.05164	10	0.06676	0.05808	0.00868
11	0.04683	0.00371	0.04312	11	0.05392	0.05373	0.00019
12	0.02856	0.00256	0.02600	12	0.04022	0.04419	-0.00397
13	0.01871	0.00187	0.01684	13	0.03246	0.03265	-0.00019
14	0.01293	0.00132	0.01161	14	0.02223	0.02655	-0.00432
15	0.00940	0.00106	0.00834	15	0.02084	0.02044	0.00040
16	0.00629	0.00107	0.00522	16	0.01644	0.01746	-0.00102
17	0.00720	0.00104	0.00616	17	0.03168	0.00778	0.02390
18	0.00192	0.00086	0.00106	18	0.01157	0.00610	0.00547
19	0.0	0.00069	-0.00069	19	0.0	0.01717	-0.01717
20	0.0	0.00066	-0.00066	20	0.0	0.03708	-0.03708
21	0.0	0.00067	-0.00067	21	0.0	0.08597	-0.08597
22	0.0	0.00063	-0.00063	22	0.0	0.08109	-0.08109
23	0.0	0.00056	-0.00056	23	0.0	0.07621	-0.07621
24	0.0	0.00047	-0.00047	24	0.0	0.07133	-0.07133
25	0.0	0.00038	-0.00038	25	0.0	0.06645	-0.06645
26	0.0	0.00037	-0.00037	26	0.0	0.06157	-0.06157
27	0.0	0.00043	-0.00043	27	0.0	0.05669	-0.05669
28	0.0	0.00051	-0.00051	28	0.0	0.05181	-0.05181
29	0.0	0.00061	-0.00061	29	0.0	0.04693	-0.04693
30	0.0	0.00075	-0.00075	30	0.0	0.04205	-0.04205
31	0.0	0.00092	-0.00092	31	0.0	0.03717	-0.03717
32	0.0	0.00110	-0.00110	32	0.0	0.03229	-0.03229
33	0.0	0.00127	-0.00127	33	0.0	0.02741	-0.02741
34	0.0	0.0	0.0	34	0.0	0.0	0.0

EXAMPLE: NINE COMPLETED YEARS OF SERVICE COULD INCLUDE ANYTHING FROM 9.0 TO 9.999 YEARS OF SERVICE. THE ASSOCIATED RATE APPLIED TO THE NUMBER OF PEOPLE AT THE BEGINNING OF THE YEAR IN THE CATAGORY WILL PRODUCE THE EXPECTED NUMBER OF OCCURANCES DURING THE FOLLOWING YEAR.

OFFICE OF THE ACTUARY - DMDC 1981

DEATH RATES FOR NONRETIRED MILITARY
AGE NEAREST BIRTHDAY

AGE	OFFICER	ENLISTED	AGE	OFFICER	ENLISTED
16	0.00149	0.00184	39	0.00105	0.00141
17	0.00149	0.00184	40	0.00110	0.00149
18	0.00149	0.00173	41	0.00117	0.00158
19	0.00149	0.00161	42	0.00127	0.00169
20	0.00145	0.00151	43	0.00138	0.00182
21	0.00142	0.00139	44	0.00150	0.00197
22	0.00139	0.00126	45	0.00162	0.00214
23	0.00136	0.00116	46	0.00176	0.00234
24	0.00133	0.00106	47	0.00189	0.00256
25	0.00131	0.00098	48	0.00203	0.00279
26	0.00129	0.00093	49	0.00215	0.00304
27	0.00127	0.00089	50	0.00227	0.00329
28	0.00124	0.00086	51	0.00237	0.00353
29	0.00121	0.00084	52	0.00246	0.00376
30	0.00118	0.00084	53	0.00254	0.00400
31	0.00115	0.00087	54	0.00261	0.00425
32	0.00112	0.00091	55	0.00267	0.00449
33	0.00109	0.00097	56	0.00273	0.00475
34	0.00107	0.00104	57	0.00278	0.00501
35	0.00106	0.00111	58	0.00284	0.00527
36	0.00104	0.00119	59	0.00289	0.00553
37	0.00103	0.00127	60	0.00294	0.00579
38	0.00103	0.00134			

OFFICE OF THE ACTUARY - DMDC 1981

NOTE: THESE DEATH RATES SHOULD NOT BE COMPARED TO OTHER PUBLISHED RATES OR USED FOR OTHER PURPOSES WITHOUT EXAMINING THE EXPOSURE FORMULA USED IN DERIVATION. THESE RATES WILL APPEAR LOWER.

TRANSFER RATES OF OFFICERS (BY COMPLETED YEARS OF SERVICE)

ORIGINAL STATUS

STATUS AFTER TRANSFER

REGULAR OFFICERS				NONREGULAR OFFICERS			
SER-VICE	NONREGULAR OFFICER	REGULAR ENLISTED	NONREGULAR ENLISTED	SER-VICE	REGULAR OFFICER	REGULAR ENLISTED	NONREGULAR ENLISTED
0	0.01504	0.00037	0.00025	0	0.01059	0.00030	0.00006
1	0.00484	0.00014	0.00016	1	0.02073	0.00022	0.00005
2	0.00162	0.00007	0.00009	2	0.08267	0.00032	0.00004
3	0.00142	0.00006	0.00006	3	0.13693	0.00026	0.00003
4	0.00141	0.00005	0.0	4	0.07667	0.00023	0.00002
5	0.00092	0.00004	0.0	5	0.09836	0.00021	0.00001
6	0.00091	0.00006	0.0	6	0.11902	0.00011	0.00001
7	0.00067	0.00022	0.0	7	0.08386	0.00030	0.00002
8	0.00051	0.00011	0.0	8	0.08844	0.00019	0.00005
9	0.00044	0.00013	0.0	9	0.05154	0.00042	0.00010
10	0.00042	0.00007	0.0	10	0.04434	0.00211	0.00017
11	0.00044	0.00020	0.0	11	0.04747	0.00405	0.00026
12	0.00057	0.00035	0.0	12	0.04571	0.00574	0.00035
13	0.00081	0.00221	0.0	13	0.04753	0.00579	0.00044
14	0.00096	0.00556	0.0	14	0.05696	0.00741	0.00048
15	0.00088	0.00276	0.0	15	0.06201	0.01138	0.00048
16	0.00076	0.00173	0.0	16	0.06097	0.01410	0.00044
17	0.00076	0.00117	0.0	17	0.04963	0.01187	0.00038
18	0.00107	0.00047	0.0	18	0.03311	0.00423	0.00031
19	0.00029	0.00040	0.0	19	0.03450	0.00083	0.00023
20	0.00019	0.00026	0.0	20	0.04554	0.0	0.0
21	0.00015	0.00022	0.0	21	0.05162	0.0	0.0
22	0.00015	0.00017	0.0	22	0.04802	0.0	0.0
23	0.00019	0.00010	0.0	23	0.03702	0.0	0.0
24	0.00018	0.00012	0.0	24	0.02651	0.0	0.0
25	0.00013	0.0	0.0	25	0.01929	0.0	0.0
26	0.00009	0.0	0.0	26	0.01325	0.0	0.0
27	0.00007	0.0	0.0	27	0.00770	0.0	0.0
28	0.00008	0.0	0.0	28	0.00456	0.0	0.0
29	0.00016	0.0	0.0	29	0.00432	0.0	0.0
30	0.00038	0.0	0.0	30	0.00559	0.0	0.0
31	0.00079	0.0	0.0	31	0.00576	0.0	0.0
32	0.00141	0.0	0.0	32	0.00534	0.0	0.0
33	0.00218	0.0	0.0	33	0.00463	0.0	0.0
34	0.0	0.0	0.0	34	0.0	0.0	0.0

EXAMPLE: NINE COMPLETED YEARS OF SERVICE COULD INCLUDE ANYTHING FROM 9.0 TO 9.999 YEARS OF SERVICE. THE ASSOCIATED RATE APPLIED TO THE NUMBER OF PEOPLE AT THE BEGINNING OF THE YEAR IN THE CATAGORY WILL PRODUCE THE EXPECTED NUMBER OF OCCURANCES DURING THE FOLLOWING YEAR.

OFFICE OF THE ACTUARY - DMDC 1981

TRANSFER RATES OF ENLISTED (BY COMPLETED YEARS OF SERVICE)

ORIGINAL STATUS

STATUS AFTER TRANSFER

REGULAR ENLISTED				NONREGULAR ENLISTED			
SER-VICE	REGULAR OFFICER	NONREGULAR OFFICER	NONREGULAR ENLISTED	SER-VICE	REGULAR OFFICER	NONREGULAR OFFICER	REGULAR ENLISTED
0	0.00001	0.00205	0.00060	0	0,00019	0.00771	0.02373
1	0.0	0.00128	0.00026	1	0.00010	0.00048	0.04622
2	0.0	0.00123	0.00021	2	0.00005	0.00065	0.12197
3	0.00004	0.00172	0.00071	3	0.00004	0.05434	0.13121
4	0.00030	0.00250	0.00043	4	0.00008	0.00497	0.08489
5	0.00089	0.00311	0.00052	5	0.00016	0.00225	0.06959
6	0.00141	0.00395	0.00059	6	0.00026	0.00190	0.05578
7	0.00180	0.00460	0.00091	7	0.00036	0.00160	0.05261
8	0.00218	0.00557	0.00079	8	0.00046	0.00140	0.05003
9	0.00299	0.00587	0.00077	9	0.00053	0.00120	0.03591
10	0.00323	0.00594	0.00046	10	0.00060	0.00110	0.02738
11	0.00331	0.00560	0.00033	11	0.00071	0.00140	0.02849
12	0.00378	0.00487	0.00019	12	0.00083	0.00140	0.02919
13	0.00451	0.00421	0.00011	13	0.00093	0.00116	0.02958
14	0.00422	0.00340	0.00006	14	0.00100	0.00091	0.02955
15	0.00372	0.00242	0.00005	15	0.00104	0.00075	0.02611
16	0.00305	0.00160	0.00004	16	0.00107	0.00056	0.01939
17	0.00241	0.00076	0.00004	17	0.00112	0.00039	0.01231
18	0.00170	0.00044	0.00004	18	0.00120	0.00017	0.01330
19	0.00135	0.00036	0.00005	19	0.00135	0.0	0.02098
20	0.00107	0.00028	0.00005	20	0.0	0.0	0.04719
21	0.00051	0.00024	0.00003	21	0.0	0.0	0.09023
22	0.00020	0.00019	0.00002	22	0.0	0.0	0.13305
23	0.00011	0.00021	0.00004	23	0.0	0.0	0.16795
24	0.00010	0.00010	0,00006	24	0.0	0.0	0.19236
25	0.0	0.00006	0.00007	25	0.0	0.0	0.20191
26	0.0	0.00016	0.00009	26	0.0	0.0	0.18876
27	0.0	0.00044	0.00014	27	0.0	0.0	0.15764
28	0.0	0.0	0.0	28	0.0	0.0	0.12878
29	0.0	0.0	0.0	29	0.0	0.0	0.12043
30	0.0	0.0	0.0	30	0.0	0.0	0.13747
31	0.0	0.0	0.0	31	0.0	0.0	0.16878
32	0.0	0.0	0.0	32	0.0	0.0	0.19135
33	0.0	0.0	0.0	33	0.0	0.0	0.18785
34	0.0	0.0	0.0	34	0.0	0.0	0.0

EXAMPLE: NINE COMPLETED YEARS OF SERVICE COULD INCLUDE ANYTHING FROM 9.0 TO 9.999 YEARS OF SERVICE. THE ASSOCIATED RATE APPLIED TO THE NUMBER OF PEOPLE AT THE BEGINNING OF THE YEAR IN THE CATAGORY WILL PRODUCE THE EXPECTED NUMBER OF OCCURANCES DURING THE FOLLOWING YEAR.

OFFICE OF THE ACTUARY - DMDC 1981

RETIRED DEATH RATES (BY AGE NEAREST BIRTHDAY)

OFFICERS

AGE	NON DISA- BILITY	PERMANENT DISA- BILITY	TEMPORARY DISABILITY YEAR OF RETIREMENT ONE	TWO	THREE	FOUR	FIVE
16	0.0	0.01307	0.03840	0.03140	0.02880	0.02610	0.01970
17	0.0	0.01208	0.03500	0.02850	0.02620	0.02390	0.01800
18	0.0	0.01118	0.03240	0.02640	0.02420	0.02210	0.01660
19	0.0	0.01032	0.02990	0.02440	0.02240	0.02040	0.01540
20	0.0	0.00953	0.02760	0.02250	0.02060	0.01880	0.01420
21	0.0	0.00874	0.02530	0.02060	0.01890	0.01720	0.01300
22	0.0	0.00804	0.02330	0.01900	0.01740	0.01590	0.01200
23	0.0	0.00745	0.02160	0.01760	0.01620	0.01480	0.01110
24	0.0	0.00696	0.02020	0.01640	0.01520	0.01390	0.01040
25	0.0	0.00657	0.01900	0.01550	0.01440	0.01320	0.00990
26	0.0	0.00629	0.01820	0.01480	0.01380	0.01270	0.00950
27	0.0	0.00611	0.01770	0.01440	0.01340	0.01240	0.00930
28	0.0	0.00602	0.01740	0.01420	0.01350	0.01280	0.00940
29	0.0	0.00647	0.01870	0.01530	0.01450	0.01370	0.01010
30	0.0	0.00691	0.02000	0.01630	0.01540	0.01460	0.01070
31	0.0	0.00733	0.02120	0.01730	0.01640	0.01540	0.01140
32	0.0	0.00773	0.02240	0.01820	0.01720	0.01620	0.01200
33	0.0	0.00811	0.02350	0.01910	0.01810	0.01700	0.01260
34	0.0	0.00848	0.02460	0.02000	0.01890	0.01770	0.01310
35	0.00156	0.00883	0.02560	0.02080	0.01960	0.01840	0.01360
36	0.00177	0.00917	0.02660	0.02160	0.02040	0.01910	0.01410
37	0.00187	0.00949	0.02750	0.02240	0.02110	0.01970	0.01460
38	0.00208	0.00979	0.02830	0.02310	0.02170	0.02030	0.01510
39	0.00211	0.01007	0.02920	0.02380	0.02230	0.02090	0.01550
40	0.00216	0.01034	0.02990	0.02440	0.02290	0.02140	0.01590
41	0.00226	0.01059	0.03070	0.02500	0.02350	0.02190	0.01630
42	0.00239	0.01083	0.03140	0.02560	0.02400	0.02240	0.01660
43	0.00256	0.01105	0.03200	0.02610	0.02450	0.02290	0.01700
44	0.00276	0.01126	0.03260	0.02660	0.02490	0.02330	0.01730
45	0.00299	0.01146	0.03320	0.02700	0.02540	0.02370	0.01760
46	0.00326	0.01166	0.03380	0.02750	0.02580	0.02410	0.01790
47	0.00357	0.01186	0.03430	0.02800	0.02630	0.02450	0.01820
48	0.00391	0.01207	0.03490	0.02850	0.02670	0.02500	0.01850
49	0.00428	0.01229	0.03560	0.02900	0.02720	0.02540	0.01890
50	0.00469	0.01253	0.03630	0.02960	0.02780	0.02590	0.01920
51	0.00513	0.01280	0.03710	0.03020	0.02840	0.02650	0.01970
52	0.00561	0.01311	0.03800	0.03090	0.02910	0.02720	0.02020
53	0.00613	0.01347	0.03900	0.03180	0.02990	0.02800	0.02080
54	0.00669	0.01391	0.04030	0.03280	0.03090	0.02900	0.02150
55	0.00729	0.01442	0.04170	0.03400	0.03210	0.03010	0.02230
56	0.00794	0.01502	0.04350	0.03540	0.03350	0.03150	0.02330
57	0.00865	0.01574	0.04560	0.03710	0.03510	0.03310	0.02440
58	0.00942	0.01659	0.04800	0.03910	0.03710	0.03500	0.02580
59	0.01026	0.01757	0.05090	0.04150	0.03930	0.03710	0.02740
60	0.01118	0.01872	0.05420	0.04420	0.04190	0.03970	0.02920
61	0.01219	0.02005	0.05800	0.04730	0.04490	0.04260	0.03130

OFFICE OF THE ACTUARY - DMDC 1981

RETIRED DEATH RATES (BY AGE NEAREST BIRTHDAY)

OFFICERS

AGE	NON DISA-BILITY	PERMANENT DISA-BILITY	------------ TEMPORARY DISABILITY -------------- YEAR OF RETIREMENT ONE	TWO	THREE	FOUR	FIVE
62	0.01331	0.02156	0.06240	0.05090	0.04840	0.04590	0.03370
63	0.01456	0.02329	0.06740	0.05500	0.05230	0.04960	0.03650
64	0.01596	0.02523	0.07300	0.05950	0.05670	0.05380	0.03950
65	0.01752	0.02741	0.07940	0.06470	0.06160	0.05850	0.04300
66	0.01928	0.02983					
67	0.02125	0.03251					
68	0.02347	0.03545					
69	0.02595	0.03867					
70	0.02874	0.04216					
71	0.03185	0.04594					
72	0.03532	0.04999					
73	0.03918	0.05434					
74	0.04346	0.05898					
75	0.04818	0.06391					
76	0.05338	0.06913					
77	0.05909	0.07464					
78	0.06535	0.08044					
79	0.07217	0.08653					
80	0.07959	0.09291					
81	0.08764	0.09959					
82	0.09550	0.10511					
83	0.10407	0.11094					
84	0.11341	0.11710					
85	0.12359	0.12359					
86	0.13758	0.13758					
87	0.15157	0.15157					
88	0.16556	0.16556					
89	0.17955	0.17955					
90	0.19354	0.19354					
91	0.20753	0.20753					
92	0.22152	0.22152					
93	0.23551	0.23551					
94	0.24950	0.24950					
95	0.26349	0.26349					
96	0.27748	0.27748					
97	0.29147	0.29147					
98	0.30546	0.30546					
99	0.31945	0.31945					
100	0.33660	0.33660					
101	0.35467	0.35467					
102	0.37372	0.37372					
103	0.39378	0.39378					
104	0.41492	0.41492					
105	0.43720	0.43720					
106	0.46067	0.46067					
107	0.48541	0.48541					
108	0.51147	0.51147					
109	0.53893	0.53893					
110	1.00000	1.00000					

RETIRED DEATH RATES (BY AGE NEAREST BIRTHDAY)

ENLISTED

	NON DISA-	PERMANENT DISA-	----------- TEMPORARY DISABILITY -------------				
			YEAR OF RETIREMENT				
AGE	BILITY	BILITY	ONE	TWO	THREE	FOUR	FIVE
16	0.0	0.01081	0.01940	0.01940	0.01560	0.01400	0.01240
17	0.0	0.00980	0.01760	0.01760	0.01410	0.01270	0.01130
18	0.0	0.00907	0.01630	0.01630	0.01310	0.01180	0.01040
19	0.0	0.00837	0.01500	0.01500	0.01210	0.01080	0.00960
20	0.0	0.00774	0.01390	0.01390	0.01120	0.01000	0.00890
21	0.0	0.00709	0.01270	0.01270	0.01020	0.00920	0.00810
22	0.0	0.00652	0.01170	0.01170	0.00940	0.00840	0.00750
23	0.0	0.00604	0.01080	0.01090	0.00870	0.00780	0.00690
24	0.0	0.00565	0.01010	0.01020	0.00820	0.00730	0.00650
25	0.0	0.00533	0.00960	0.00960	0.00770	0.00690	0.00610
26	0.0	0.00510	0.00910	0.00920	0.00740	0.00660	0.00590
27	0.0	0.00495	0.00890	0.00890	0.00710	0.00640	0.00570
28	0.0	0.00489	0.00880	0.00880	0.00710	0.00630	0.00560
29	0.0	0.00489	0.00880	0.00880	0.00710	0.00630	0.00560
30	0.0	0.00498	0.00890	0.00890	0.00720	0.00650	0.00570
31	0.0	0.00513	0.00920	0.00920	0.00740	0.00660	0.00590
32	0.0	0.00534	0.00960	0.00960	0.00770	0.00690	0.00610
33	0.0	0.00561	0.01010	0.01010	0.00810	0.00730	0.00640
34	0.0	0.00594	0.01060	0.01070	0.00860	0.00770	0.00680
35	0.00271	0.00631	0.01130	0.01130	0.00910	0.00820	0.00720
36	0.00271	0.00671	0.01200	0.01210	0.00970	0.00870	0.00770
37	0.00271	0.00715	0.01280	0.01280	0.01030	0.00930	0.00820
38	0.00271	0.00762	0.01370	0.01370	0.01100	0.00990	0.00870
39	0.00271	0.00811	0.01450	0.01460	0.01170	0.01050	0.00930
40	0.00271	0.00863	0.01550	0.01550	0.01250	0.01120	0.00990
41	0.00279	0.00917	0.01640	0.01650	0.01320	0.01190	0.01050
42	0.00296	0.00974	0.01750	0.01750	0.01410	0.01260	0.01120
43	0.00322	0.01034	0.01850	0.01860	0.01490	0.01340	0.01190
44	0.00359	0.01097	0.01970	0.01970	0.01580	0.01420	0.01260
45	0.00406	0.01164	0.02090	0.02090	0.01680	0.01510	0.01340
46	0.00458	0.01237	0.02220	0.02220	0.01790	0.01600	0.01420
47	0.00509	0.01315	0.02360	0.02360	0.01900	0.01700	0.01510
48	0.00565	0.01399	0.02510	0.02510	0.02020	0.01810	0.01610
49	0.00630	0.01490	0.02670	0.02680	0.02150	0.01930	0.01710
50	0.00710	0.01588	0.02850	0.02850	0.02290	0.02060	0.01820
51	0.00810	0.01694	0.03040	0.03040	0.02440	0.02190	0.01940
52	0.00922	0.01807	0.03240	0.03250	0.02610	0.02340	0.02070
53	0.01036	0.01928	0.03450	0.03460	0.02780	0.02500	0.02210
54	0.01140	0.02056	0.03680	0.03690	0.02970	0.02660	0.02360
55	0.01232	0.02193	0.03930	0.03940	0.03160	0.02840	0.02520
56	0.01318	0.02337	0.04190	0.04200	0.03370	0.03030	0.02680
57	0.01410	0.02490	0.04460	0.04470	0.03590	0.03230	0.02860
58	0.01513	0.02651	0.04750	0.04760	0.03830	0.03430	0.03040
59	0.01630	0.02822	0.05060	0.05070	0.04070	0.03660	0.03240
60	0.01766	0.03002	0.05380	0.05390	0.04330	0.03890	0.03450
61	0.01927	0.03193	0.05720	0.05730	0.04610	0.04140	0.03660

RETIRED DEATH RATES (BY AGE NEAREST BIRTHDAY)

ENLISTED

AGE	NON DISA-BILITY	PERMANENT DISA-BILITY	------------ TEMPORARY DISABILITY ------------				
			YEAR OF RETIREMENT				
			ONE	TWO	THREE	FOUR	FIVE
62	0.02113	0.03395	0.06080	0.06100	0.04900	0.04400	0.03900
63	0.02315	0.03609	0.06470	0.06480	0.05210	0.04670	0.04140
64	0.02523	0.03834	0.06870	0.06890	0.05530	0.04970	0.04400
65	0.02738	0.04072	0.07300	0.07310	0.05880	0.05270	0.04670
66	0.02963	0.04323					
67	0.03216	0.04588					
68	0.03509	0.04868					
69	0.03853	0.05163					
70	0.04245	0.05475					
71	0.04678	0.05803					
72	0.05136	0.06148					
73	0.05604	0.06511					
74	0.06072	0.06892					
75	0.06538	0.07291					
76	0.07005	0.07708					
77	0.07483	0.08142					
78	0.07984	0.08594					
79	0.08523	0.09061					
80	0.09119	0.09544					
81	0.09787	0.10043					
82	0.10375	0.10578					
83	0.10998	0.11141					
84	0.11659	0.11734					
85	0.12359	0.12359					
86	0.13758	0.13758					
87	0.15157	0.15157					
88	0.16556	0.16556					
89	0.17955	0.17955					
90	0.19354	0.19354					
91	0.20753	0.20753					
92	0.22152	0.22152					
93	0.23551	0.23551					
94	0.24950	0.24950					
95	0.26349	0.26349					
96	0.27748	0.27748					
97	0.29147	0.29147					
98	0.30546	0.30546					
99	0.31945	0.31945					
100	0.33660	0.33660					
101	0.35467	0.35467					
102	0.37372	0.37372					
103	0.39378	0.39378					
104	0.41492	0.41492					
105	0.43720	0.43720					
106	0.46067	0.46067					
107	0.48541	0.48541					
108	0.51147	0.51147					
109	0.53893	0.53893					
110	1.00000	1.00000					

RATES OF NONDEATH, NONVA LOSS FROM NONDISABILITY

(AGE NEAREST BIRTHDAY AT BEGINNING OF YEAR)

AGE	OFFICER	ENLISTED	AGE	OFFICER	ENLISTED
16	0.0	0.0	56	0.00423	0.01496
17	0.0	0.0	57	0.00453	0.01233
18	0.0	0.0	58	0.00452	0.01188
19	0.0	0.0	59	0.00408	0.01237
20	0.0	0.0	60	0.00323	0.01165
21	0.0	0.0	61	0.00226	0.00967
22	0.0	0.0	62	0.00152	0.00791
23	0.0	0.0	63	0.00114	0.00666
24	0.0	0.0	64	0.00098	0.00615
25	0.0	0.0	65	0.00085	0.00558
26	0.0	0.0	66	0.00067	0.00413
27	0.0	0.0	67	0.00046	0.00284
28	0.0	0.0	68	0.00029	0.00211
29	0.0	0.0	69	0.00019	0.00186
30	0.0	0.0	70	0.00015	0.00146
31	0.0	0.0	71	0.00014	0.00101
32	0.0	0.0	72	0.00013	0.00073
33	0.0	0.0	73	0.00013	0.00065
34	0.0	0.0	74	0.00013	0.00067
35	0.0	0.00297	75	0.00014	0.00072
36	0.0	0.00221	76	0.00014	0.00073
37	0.0	0.00158	77	0.00015	0.00064
38	0.00100	0.00109	78	0.00019	0.00073
39	0.00037	0.00072	79	0.00023	0.00111
40	0.00012	0.00047	80	0.00027	0.00177
41	0.00015	0.00031	81	0.00029	0.00263
42	0.00034	0.00022	82	0.00030	0.00358
43	0.00053	0.00017	83	0.00031	0.00444
44	0.00055	0.00015	84	0.00036	0.00505
45	0.00046	0.00017	85	0.00046	0.00523
46	0.00035	0.00022	86	0.00057	0.00503
47	0.00021	0.00031	87	0.00068	0.00470
48	0.00020	0.00043	88	0.00073	0.00454
49	0.00028	0.00058	89	0.00072	0.00469
50	0.00034	0.00075	90	0.00064	0.00509
51	0.00049	0.00093	91	0.00050	0.00541
52	0.00061	0.00113	92	0.00032	0.00527
53	0.00055	0.00137	93	0.00011	0.00447
54	0.00274	0.00837	94	0.0	0.00297
55	0.00365	0.01732	95	0.0	0.0

OFFICE OF THE ACTUARY - DMDC 1981

[illegible]

[illegible]

	[illegible]					ENLISTED				
	[illegible]					YEAR OF [illegible]				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.07644	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.07414	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.06545	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.05592	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.03946	[illegible]	[illegible]	[illegible]	[illegible]
28	.04805	[illegible]	[illegible]	[illegible]	[illegible]	.03936	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	.10752	.03502	.04450	[illegible]	[illegible]	[illegible]
30	.04300	[illegible]	[illegible]	.05937	[illegible]	.03447	.02651	.05007	.04017	[illegible]
31	[illegible]	[illegible]	[illegible]	.05454	[illegible]	.03760	.05573	.05773	[illegible]	[illegible]
32	[illegible]	[illegible]	[illegible]	[illegible]	.10756	[illegible]	[illegible]	.05609	.04651	[illegible]
33	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.04174	.05015	.04507	[illegible]
34	[illegible]	[illegible]	[illegible]	[illegible]	.07428	[illegible]	.04161	.05073	.04084	[illegible]
35	[illegible]	[illegible]	[illegible]	.04436	.06506	.02714	.05499	.04022	.03901	[illegible]
36	[illegible]	[illegible]	[illegible]	.04344	.05013	.02444	.04305	.04564	.03718	.09145
37	[illegible]	[illegible]	[illegible]	[illegible]	.05621	.02199	.04322	[illegible]	.03535	.08707
38	[illegible]	[illegible]	.04445	.04200	.05593	.01909	.03959	.04025	.03357	[illegible]
39	[illegible]	[illegible]	[illegible]	.04153	.05759	.01602	.03669	.03748	.03169	.08071
40	.01382	.04142	.02974	.04102	.06044	.01382	.03130	.03466	.02936	[illegible]
41	.01267	[illegible]	.02806	.04059	.06344	.01164	.02705	.03180	.02803	[illegible]
42	.01061	[illegible]	.02466	.04027	.06542	.00934	.02462	.02890	.02620	[illegible]
43	.00859	.02744	.02092	.03998	.06665	.00839	.02134	.02613	.02437	[illegible]
44	.00672	[illegible]	.01789	.03949	.06712	.00724	.01774	.02329	.02254	[illegible]
45	.00503	.01944	.01512	.03895	.06676	.00632	.01480	.02047	.02071	[illegible]
46	.00354	.01587	.01222	.03834	.06532	.00556	.01773	.01765	.01887	[illegible]
47	.00227	.01747	.01030	.03749	.06312	.00490	.01766	.01425	.01704	[illegible]
48	.00119	[illegible]	.00802	.03649	.06020	.00426	[illegible]	.01205	.01521	[illegible]
49	.00100	.00742	.00591	.03572	.05641	.00360	.01807	.00927	.01330	.04491
50	.00100	.00376	[illegible]	.03542	.05206	.00294	.01998	.00649	.01155	[illegible]
51	.00100	.00173	.00223	.03567	.04733	.00228	.02130	.00372	.00972	.03775
52	.00100	.00100	.00100	.03643	.04210	.00162	.01971	.00100	.00789	.03417
53	.00100	.00100	.00100	.03776	.03599	.00100	.01670	.00100	.00606	.03055
54	.00100	.00100	.00100	.03887	.02943	.00100	.01297	.00100	.00423	.02701
55	.00100	.00100	.00100	.04011	.02277	.00100	.00911	.00100	.00240	.02343
56	.00100	.00100	.00100	[illegible]	.01586	.00100	.00528	.00100	.00100	.01985
57	.00100	.00100	.00100	[illegible]	.00907	.00100	.00152	.00100	.00100	.01627
58	.00100	.00100	.00100	[illegible]	.00230	.00100	.00100	.00100	.00100	[illegible]
59	.00100	.00100	.00100	[illegible]	.00100	.00100	.00100	.00100	.00100	.00911
60	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100
61	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100
62	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100
63	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100
64	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100
65	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100	.00100

TRANSFER RATES FROM TEMPORARY DISABILITY TO PERMANENT DISABILITY
(AGE NEAREST BIRTHDAY AT BEGINNING OF THE YEAR)

	OFFICERS				ENLISTEDS			
	------- YEAR OF RETIREMENT ------				----- YEAR OF RETIREMENT -------			
AGE	ONE	TWO	THREE	FOUR	ONE	TWO	THREE	FOUR
16	0.06910	0.30531	0.23289	0.40977	0.06748	0.41156	0.22541	0.34714
17	0.06910	0.30531	0.23289	0.40977	0.06748	0.41156	0.22541	0.34714
18	0.06910	0.30531	0.23289	0.40977	0.06748	0.41156	0.22541	0.34714
19	0.06910	0.30531	0.23289	0.40977	0.07140	0.41156	0.22541	0.34714
20	0.06910	0.30531	0.23289	0.40977	0.07457	0.40459	0.22541	0.34714
21	0.06910	0.30531	0.23289	0.40977	0.07675	0.39815	0.23065	0.34714
22	0.06910	0.30531	0.23289	0.40977	0.08094	0.39224	0.23592	0.35445
23	0.06910	0.30531	0.23289	0.40977	0.08683	0.38685	0.24124	0.36111
24	0.06910	0.30531	0.23289	0.40977	0.09482	0.38199	0.24660	0.36714
25	0.06910	0.30531	0.23289	0.40977	0.10446	0.37765	0.25199	0.37254
26	0.07960	0.31085	0.23289	0.40977	0.11374	0.37384	0.25743	0.37731
27	0.08981	0.31657	0.23289	0.40977	0.11713	0.37055	0.26290	0.38147
28	0.09965	0.32290	0.23388	0.40977	0.11426	0.36780	0.26841	0.38501
29	0.10876	0.33010	0.23495	0.40834	0.10754	0.36557	0.27396	0.38796
30	0.11690	0.33842	0.23666	0.40688	0.10065	0.36386	0.27955	0.39031
31	0.12405	0.34757	0.23878	0.40525	0.09928	0.36268	0.28518	0.39207
32	0.13010	0.35698	0.24123	0.40457	0.10329	0.36203	0.29085	0.39323
33	0.13493	0.36616	0.24474	0.40543	0.11036	0.36190	0.29656	0.39381
34	0.13867	0.37498	0.24930	0.40793	0.11874	0.36230	0.30231	0.39381
35	0.14167	0.38326	0.25446	0.41224	0.12593	0.36322	0.30809	0.39323
36	0.14428	0.39033	0.26006	0.41850	0.12898	0.36467	0.31392	0.39211
37	0.14650	0.39581	0.26583	0.42699	0.12845	0.36665	0.31978	0.39044
38	0.14813	0.39992	0.27147	0.43689	0.12761	0.36915	0.32568	0.38827
39	0.14964	0.40292	0.27638	0.44735	0.12997	0.37217	0.33162	0.38561
40	0.15107	0.40502	0.28048	0.45758	0.13712	0.37573	0.33759	0.38252
41	0.15212	0.40615	0.28454	0.46699	0.14786	0.37980	0.34361	0.37902
42	0.15273	0.40626	0.28876	0.47457	0.15957	0.38440	0.34966	0.37518
43	0.15355	0.40493	0.29275	0.47968	0.17007	0.38953	0.35575	0.37103
44	0.15516	0.40220	0.29612	0.48222	0.17770	0.39518	0.36188	0.36662
45	0.15871	0.39803	0.29945	0.48240	0.18087	0.40135	0.36805	0.36200
46	0.16495	0.39292	0.30341	0.48024	0.18165	0.40805	0.37425	0.35722
47	0.17439	0.38694	0.30830	0.47633	0.18246	0.41527	0.38050	0.35231
48	0.18688	0.38018	0.31404	0.47159	0.18511	0.42301	0.38678	0.34733
49	0.20202	0.37297	0.31981	0.46658	0.18727	0.43128	0.39309	0.34228
50	0.21929	0.36574	0.32519	0.46128	0.18559	0.44008	0.39945	0.33722
51	0.23805	0.35875	0.32909	0.45531	0.17896	0.44939	0.40584	0.33215
52	0.25730	0.35188	0.33179	0.44844	0.17052	0.45923	0.41227	0.32709
53	0.27657	0.34520	0.33339	0.44084	0.16406	0.46960	0.41874	0.32207
54	0.29559	0.33869	0.33371	0.43275	0.16277	0.48048	0.42525	0.31707
55	0.31405	0.33252	0.33297	0.42418	0.16991	0.49190	0.43179	0.31211
56	0.33162	0.32697	0.33142	0.41479	0.18892	0.50383	0.43837	0.30720
57	0.34866	0.32201	0.32927	0.40433	0.22208	0.51629	0.44499	0.30232
58	0.36533	0.31752	0.32691	0.39306	0.27035	0.52927	0.45165	0.29749
59	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270
60	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270
61	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270
62	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270
63	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270
64	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270
65	0.38185	0.31319	0.32455	0.38143	0.33415	0.54278	0.45834	0.29270

RATES OF NONDEATH, NONVA LOSS FROM PERMANENT DISABILITY

(AGE NEAREST BIRTHDAY AT BEGINNING OF THE YEAR)

AGE	OFFICER	ENLISTED	AGE	OFFICER	ENLISTED
16	0.0	0.0	54	0.00101	0.00458
17	0.0	0.0	55	0.00095	0.00543
18	0.0	0.0	56	0.00090	0.00610
19	0.0	0.0	57	0.00085	0.00653
20	0.0	0.00031	58	0.00079	0.00668
21	0.0	0.00060	59	0.00075	0.00654
22	0.0	0.00084	60	0.00070	0.00616
23	0.0	0.00104	61	0.00065	0.00559
24	0.0	0.00119	62	0.00060	0.00489
25	0.0	0.00131	63	0.00056	0.00415
26	0.0	0.00138	64	0.00052	0.00342
27	0.0	0.00140	65	0.00048	0.00276
28	0.0	0.00138	66	0.00043	0.00221
29	0.0	0.00134	67	0.00040	0.00179
30	0.0	0.00128	68	0.00036	0.00151
31	0.0	0.00122	69	0.00032	0.00135
32	0.0	0.00115	70	0.00029	0.00131
33	0.0	0.00107	71	0.00025	0.00136
34	0.0	0.00099	72	0.00022	0.00149
35	0.0	0.00090	73	0.00019	0.00167
36	0.0	0.00080	74	0.00016	0.00187
37	0.0	0.00070	75	0.00013	0.00208
38	0.0	0.00060	76	0.00011	0.00227
39	0.0	0.00052	77	0.00008	0.00243
40	0.0	0.00045	78	0.00006	0.00256
41	0.0	0.00041	79	0.00004	0.00263
42	0.0	0.00038	80	0.00001	0.00266
43	0.0	0.00037	81	0.0	0.00263
44	0.0	0.00037	82	0.0	0.00255
45	0.0	0.00038	83	0.0	0.00240
46	0.0	0.00041	84	0.0	0.00219
47	0.0	0.00048	85	0.0	0.00188
48	0.0	0.00063	86	0.0	0.00151
49	0.0	0.00090	87	0.0	0.00107
50	0.00124	0.00133	88	0.0	0.00055
51	0.00118	0.00195	89	0.0	0.0
52	0.00112	0.00274	90	0.0	0.0
53	0.00106	0.00364			

OFFICE OF THE ACTUARY - DMDC 1981

RATES OF DIVORCE

Age	Rate
16	.0050
17	.0127
18	.0128
19	.0130
20	.0130
21	.0130
22	.0130
23	.0130
24	.0132
25	.0133
26	.0133
27	.0133
28	.0133
29	.0133
30	.0120
31	.0120
32	.0110
33	.0110
34	.0100
35	.0090
36	.0090
37	.0090
38	.0080
39	.0070
40	.0060
41	.0050
42	.0048
43	.0048
44	.0048
45	.0048
46	.0048
47	.0046
48	.0044
49	.0042
50	.0040
51	.0038
52	.0036
53	.0034
54	.0032
55	.0030
56	.0028
57	.0026
58	.0024
59	.0022
60	.0020
61	.0019
62	.0017
63	.0017
64	.0017
65	.0017
66	.0017
67	.0016
68	.0015
69	.0014
70	.0013
71	.0012
72	.0011
73	.0010
74	.0009
75	.0008
76	.0007
77	.0006
78	.0005
79	.0004
80	.0003
81	.0002
82	.0001

RATES OF REMARRIAGE (AGE NEAREST BIRTHDAY)

AGE	RATE	AGE	RATE
16	0.0983	38	0.0442
17	0.0983	39	0.0409
18	0.0983	40	0.0382
19	0.0983	41	0.0354
20	0.0983	42	0.0327
21	0.0983	43	0.0301
22	0.0983	44	0.0280
23	0.0983	45	0.0258
24	0.0983	46	0.0238
25	0.0983	47	0.0219
26	0.0988	48	0.0204
27	0.0930	49	0.0186
28	0.0870	50	0.0172
29	0.0815	51	0.0157
30	0.0767	52	0.0145
31	0.0714	53	0.0133
32	0.0672	54	0.0121
33	0.0627	55	0.0110
34	0.0582	56	0.0101
35	0.0549	57	0.0091
36	0.0510	58	0.0081
37	0.0474	59	0.0073

OFFICE OF THE ACTUARY - DMDC 1981

CHILD TERMINATION RATES

Age Nearest Birthday

0	.00
1	.00
2	.00
3	.00
4	.00
5	.00
6	.00
7	.00
8	.00
9	.00
10	.00
11	.00
12	.00
13	.00
14	.00
15	.00
16	.00
17	.17
18	.32
19	.20
20	.20
21	.40
22	.80
23	.80

February 1981
Office of the Actuary

SURVIVOR DEATH RATES (AGE NEAREST BIRTHDAY)

AGE	RATE	AGE	RATE
0	0.0	55	0.0062
1	0.0	56	0.0067
2	0.0	57	0.0071
3	0.0	58	0.0077
4	0.0	59	0.0083
5	0.0	60	0.0090
6	0.0	61	0.0098
7	0.0	62	0.0105
8	0.0	63	0.0114
9	0.0	64	0.0124
10	0.0	65	0.0135
11	0.0	66	0.0145
12	0.0	67	0.0158
13	0.0	68	0.0171
14	0.0	69	0.0187
15	0.0	70	0.0200
16	0.0007	71	0.0221
17	0.0007	72	0.0240
18	0.0007	73	0.0264
19	0.0007	74	0.0280
20	0.0007	75	0.0307
21	0.0007	76	0.0339
22	0.0007	77	0.0376
23	0.0007	78	0.0415
24	0.0007	79	0.0460
25	0.0007	80	0.0501
26	0.0007	81	0.0559
27	0.0007	82	0.0628
28	0.0007	83	0.0704
29	0.0008	84	0.0783
30	0.0009	85	0.0869
31	0.0009	86	0.0972
32	0.0010	87	0.1080
33	0.0011	88	0.1188
34	0.0011	89	0.1310
35	0.0012	90	0.1427
36	0.0013	91	0.1539
37	0.0014	92	0.1670
38	0.0015	93	0.1782
39	0.0017	94	0.1899
40	0.0018	95	0.2016
41	0.0020	96	0.2133
42	0.0022	97	0.2241
43	0.0024	98	0.2367
44	0.0026	99	0.2475
45	0.0028	100	0.2597
46	0.0030	101	0.2718
47	0.0033	102	0.2880
48	0.0036	103	0.2970
49	0.0040	104	0.3060
50	0.0043	105	0.3150
51	0.0047	106	0.3240
52	0.0051	107	0.3330
53	0.0055	108	0.3420
54	0.0059	109	1.0000

OFFICE OF THE ACTUARY - DMDC 1981

APPENDIX B

SUMMARY OF THE MILITARY RETIREMENT SYSTEM AS OF 30 SEPTEMBER 1980

The military retirement system as summarized below applies to the Army, Navy, Marine Corps, and Air Force. However, most of the provisions also apply to retirement systems for members of the Coast Guard (administered by the Department of Transportation) officers of the Public Health Service (administered by DHHS), and officers of the National Oceanic and Atmospheric Administration (administered by the Department of Commerce). The key provisions of the military retirement system are as follows:

- Nondisability retirement after 20 years of active service equal to (base pay) times (years of service) times (2 1/2%). There is a limit of 75% of base pay. Base pay is equal to terminal basic pay if retiree first became a member of the Armed Services before 8 September 1980. If the retiree first became a member of the Armed Services on or after 8 September 1980, base pay is equal to the average of the highest 36 months of basic pay.
- Disability retirement with similar provisions.
- Reserve retirement with parallel provisions.
- Optional survivor benefit protections for retirees and retirement eligible reservists.
- CPI adjustments for both retirement pay and survivor annuities.
- No contributions by the service members of the military services and no retirement fund, but reductions in member annuities when survivor benefits are elected.
- No vesting prior to 20 years of service.
- Interrelationships with Social Security, Veterans Administration benefits, and other federal service.

Cost-of-Living Increases

All nondisability retirement, disability retirement, and most survivor annuities are presently adjusted semiannually for inflation. Cost-of-living adjustments are scheduled to occur every six months, on March 1st and September 1st, to be reflected in checks issued at the end of those months.

The cost-of-living increase effective March 1st is computed by calculating the percentage increase (adjusted to the nearest 1/10 of one percent) in the Consumer Price Index from the previous June to the previous December. Similarly, the cost-of-living increase effective September 1st is obtained by calculating the percentage increase in the June CPI over the CPI from the previous December.

The Bureau of Labor Statistics publishes two Consumer Price Indexes: (1) a CPI for All Urban Consumers, and (2) a revised CPI for Urban Wage Earners and Clerical Workers. OMB has determined that the revised CPI should be used in calculating military cost-of-living increases.

Nondisability Retirement from Active Service

The current system allows voluntary retirement upon credit of at least 20 years of service at any age, subject to Service Secretary approval. The military retiree receives an immediate annuity calculated as 2 1/2% of base pay for each year of creditable service, subject to a maximum of 75% of base pay. Base pay is equal to terminal basic pay if retiree first became a member of the Armed Services before 8 September 1980. If the retiree first became a member of the Armed Services on or after 8 September 1980, base pay is equal to the average of the highest 36 months of basic pay. In calculating years of service, over 6 months service is rounded up to a full year.

In FY80 1.1 million nondisability retirees were paid $10.5 billion.

Disability Retirement

If a military member is disabled he/she is entitled to disability retired pay, assuming the disability is at least 30% (under a standard schedule of rating disabilities by the Veterans Administration) and either (1) the member has 8 years of service; (2) the disability results from active duty or; (3) the disability occurred in the line of duty during a time of war or national emergency or certain other time periods.

In disability retirement the member receives base pay multiplied by the larger of (1) 2 1/2% times years of service, or (2) percent disability. The benefit cannot be more than 75% of base pay. Only the excess of (1) over (2) is subject to federal income taxes.

Members whose disability may not be permanent are placed on a temporary disability retired list and receive disability retirement pay just as if they were permanently disabled. However, they must be physically examined once every 18 months to determine any change in disability until a final determination is made within 5 years. While on the temporary disability retired list, the member receives base pay multiplied by the larger of (1) 2 1/2% times years of service or, (2) percent disability with a minimum of 50% of base pay. Base pay is equal to terminal basic pay if retiree first became a member of the Armed Services before 8 September 1980. If the retiree first became a member of the Armed Services on or after 8 September 1980, base pay is equal to the average of the highest three years basic pay.

In FY80, 151,000 disability retirees were paid $1.2 billion.

Reserve Retirement

It is also possible for members of the reserves to retire after 20 years of service, the last 8 of which must be in a reserve component. Reserve retired pay, however, does not begin until age 60. If the reservist was first a member of the Armed Services before 8 September 1980, the retired pay (base pay) is based upon active duty pay scales for the member's grade in effect at the time the retired pay commences. If the reservist first became a member of the Armed Services on or after 8 September 1980, retired pay is based upon (base pay) the average basic pay for the member's grade in the last 3 years that he/she was a member of the Armed Services. The retired pay is computed as (base pay) times (2.5%) times (years of creditable service). The years of service is in turn determined using a point system, where 360 points convert to a year of service. Typically, a point is awarded for a day of service or a drill attendance, with 15 points being awarded for a year's membership in a reserve component.

Survivor Benefits

Legislation originating in 1953 provided optional survivor benefits later referred to as the Retired Serviceman's Family Protection Plan (RSFPP). The plan proved to be inadequate since the survivor annuities were never adjusted for inflation and could not be more than 50% of retired pay. RSFPP was designed to be self-supporting in the sense that member annuities were reduced so that the present value of the reductions would equal the present value of survivor annuities. However, no fund was involved.

RSFPP still insures those servicemen retired before 1972 who did not convert to the new plan and still pays survivor annuities. However, since 21 September 1972, RSFPP has been replaced by the Survivor Benefit Plan (SBP) for new retirees. Under SBP, member annuities are also reduced but the SBP is not a self-supporting program; its costs are shared by the Government and retired members. The survivor annuity is originally 55% of the member's base amount. The base amount is elected by the member but can be no less than $300 (or full pay if the monthly pay is less than $300) and no more than the member's whole retired pay. SBP annuities are adjusted with CPI increases, and integrated with Social Security and Veterans' benefits.

For reserve retirees the same set of reductions provide coverage after the reservist reaches age 60 (when the reservist begins to receive retired pay). A second set of optional reductions (funded by the employee only) extend this coverage to the reservist who has enough service to retire but who has not attained age 60.

In FY80 survivors were paid $256 million.

Relationship with Social Security

Beginning in 1957 military members on active duty have been full participants in the Social Security System. Retirement annuities from the two systems are additive. However, there is a social security offset for surviving spouses of SBP participants equal to 100% of the social security benefit attributable solely to military service, with the exception that the offset provisions apply to a spouse with one child and spouses over age 62 who are not working in Social Security covered employment. At no time can a Social Security offset be greater than 40% of the survivor annuity.

Relationship with Veterans Administration Benefits

The Veterans Administration provides compensation to service connected and certain nonservice connected disabilities. This annuity can be in place of or in combination with DoD retirement pay (nondisability), but is not additive. Since VA annuities are exempt from federal income taxes, it is sometimes to the advantage of a member to elect whatever VA benefits are available.

Veterans Administration benefits also overlap survivor benefits through the Dependency and Indemnity Compensation (DIC) program. DIC is payable to survivors of veterans who died from service connected causes and are deducted from the SBP annuity.

Interrelationship with Other Federal Service

For retirement purposes no credit is given for other federal service, except where cross-service transferability is allowed. However, military service is generally creditable toward the Federal civilian retirement systems if military retired pay is waived. Military service is not generally creditable under both systems (but is for reservists and certain disability retirees). Retired regular officers employed by the federal government lose a substantial portion of their retired pay while so employed. All former members are subject to a combined ceiling equivalent to level V of the Executive Schedule.

APPENDIX C

OFFICERS AVERAGE MONTHLY ACTIVE DUTY SALARIES BY ACTIVE YEARS OF SERVICE AND AGE FOR FY1980 VALUATION

YEARS OF ACTIVE SERVICE

AGE	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30+	AVG
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	850
20	877	876	925	967	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	898
21	895	942	986	993	1057	1138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	931
22	917	963	1019	1068	1066	1076	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	929
23	919	951	1095	1120	1124	1112	1145	1206	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	944
24	934	972	1158	1259	1216	1177	1154	1249	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1037
25	985	999	1193	1389	1378	1277	1225	1195	1264	1319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1188
26	1202	1076	1221	1398	1548	1408	1339	1266	1247	1251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1341
27	1202	1295	1273	1419	1550	1609	1460	1364	1313	1302	1323	1425	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1444
28	1202	1295	1458	1440	1547	1616	1652	1466	1388	1365	1362	1324	1406	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1513
29	1202	1295	1458	1576	1530	1600	1658	1679	1487	1436	1417	1430	1291	1355	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1561
30	1202	1295	1458	1576	1662	1580	1650	1690	1711	1512	1481	1460	1474	1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1604
31	1202	1295	1458	1576	1662	1722	1641	1697	1724	1748	1564	1500	1516	1526	1537	1704	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1646
32	1202	1295	1458	1576	1662	1722	1781	1716	1744	1774	1810	1591	1587	1604	1579	1536	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1705
33	1202	1295	1458	1576	1662	1722	1781	1844	1776	1794	1840	1872	1686	1684	1666	1652	1523	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1767
34	1202	1295	1458	1576	1662	1722	1781	1844	1907	1836	1854	1910	1961	1796	1779	1678	1691	1576	1496	0	0	0	0	0	0	0	0	0	0	0	0	1837
35	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	1894	1927	1989	2016	1876	1793	1714	1739	1661	1664	0	0	0	0	0	0	0	0	0	0	0	1898
36	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	1950	2006	2047	2075	1917	1826	1782	1808	1790	1832	0	0	0	0	0	0	0	0	0	0	1958
37	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2018	2062	2115	2160	1975	1875	1862	1876	1866	1731	0	0	0	0	0	0	0	0	0	2019
38	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2076	2128	2204	2281	2041	1951	1924	1931	1890	1849	0	0	0	0	0	0	0	0	2097
39	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2149	2212	2315	2356	2109	2042	1974	1988	1904	2126	0	0	0	0	0	0	0	2178
40	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2254	2317	2391	2429	2185	2158	2040	2054	2005	1972	0	0	0	0	0	0	2273
41	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2361	2399	2460	2488	2295	2226	2103	2104	2059	2091	0	0	0	0	0	2354
42	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2429	2473	2520	2585	2398	2264	2152	2167	2160	2251	0	0	0	0	2426
43	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2515	2518	2625	2704	2528	2335	2224	2246	2249	0	0	0	0	2511
44	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2587	2625	2749	2863	2632	2454	2316	2312	2334	2515	0	0	2600
45	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2704	2765	2878	2963	2767	2603	2417	2377	2434	0	0	2710
46	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2816	2890	2966	3002	2855	2748	2503	2507	2596	2757	2791
47	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	2925	2965	3043	3075	2937	2788	2665	2671	2777	2854
48	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	2993	3029	3141	3174	2973	2870	2764	2827	2926
49	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	3075	3058	3113	3237	3244	3042	2923	2957	2982
50	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	3075	3132	3118	3190	3286	3315	3144	3040	3035
51	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	3075	3132	3150	3155	3268	3335	3375	3188	3075
52	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	3075	3132	3150	3167	3220	3302	3439	3381	3089
53	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	3075	3132	3150	3167	3195	3277	3356	3517	3049
54	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	3075	3132	3150	3167	3195	3226	3335	3628	2965
55	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	3075	3132	3150	3167	3195	3226	3263	3744	3103
56	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	3075	3132	3150	3167	3195	3226	3263	3675	2974
57	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	3075	3132	3150	3167	3195	3226	3263	3675	2819
58	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	3075	3132	3150	3167	3195	3226	3263	3675	2820
59	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	3075	3132	3150	3167	3195	3226	3263	3675	2794
60+	1202	1295	1458	1576	1662	1722	1781	1844	1907	1970	2032	2086	2138	2203	2306	2415	2503	2576	2647	2705	2803	2903	3007	3075	3132	3150	3167	3195	3226	3263	3675	2951
AVG	1016	1065	1256	1433	1563	1621	1664	1696	1719	1761	1812	1857	1918	1985	2044	2111	2216	2288	2351	2375	2455	2562	2669	2785	2821	2900	2983	3063	3109	3198	3410	1809

NOTES: SALARY FIGURES INCLUDE OCT/1980 PAY INCREASE.
SALARY FIGURES HAVE NOT BEEN ADJUSTED.
AGE IS AGE NEAREST BIRTHDAY.

DMDC - DOD ACTUARY'S OFFICE

ENLISTED AVERAGE MONTHLY ACTIVE DUTY SALARIES BY ACTIVE YEARS OF SERVICE AND AGE FOR FY1980 VALUATION

YEARS OF ACTIVE SERVICE

AGE	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30+	AVG
16	520	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	520
17	505	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	505
18	522	561	597	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	524
19	529	574	605	675	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	546
20	536	581	622	655	720	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	576
21	540	585	630	673	717	736	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	611
22	543	587	635	681	724	747	773	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	640
23	546	591	637	687	729	751	787	763	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	665
24	548	595	640	689	729	752	788	817	787	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	688
25	550	597	643	690	732	759	792	819	854	809	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	715
26	553	597	645	693	732	758	791	818	853	883	840	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	740
27	553	604	645	695	733	762	795	822	854	880	922	922	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	768
28	553	604	655	697	736	764	795	824	852	874	916	956	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	794
29	553	604	655	706	740	764	799	830	857	878	911	952	996	1010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	819
30	553	604	655	706	753	770	806	837	866	884	909	940	989	1028	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	853
31	553	604	655	706	753	791	811	847	877	901	919	940	983	1022	1066	1101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	894
32	553	604	655	706	753	791	833	853	889	913	934	948	980	1014	1054	1096	1112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	933
33	553	604	655	706	753	791	933	876	894	922	944	964	983	1017	1049	1085	1128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	973
34	553	604	655	706	753	791	833	876	912	924	951	969	996	1020	1052	1078	1121	1142	0	0	0	0	0	0	0	0	0	0	0	0	0	1009
35	553	604	655	706	753	791	833	876	912	941	953	973	996	1028	1055	1080	1114	1151	1184	1237	0	0	0	0	0	0	0	0	0	0	0	1044
36	553	604	655	706	753	791	833	876	912	941	974	977	1001	1026	1058	1078	1110	1145	1182	1213	1302	0	0	0	0	0	0	0	0	0	0	1083
37	553	604	655	706	753	791	833	876	912	941	974	1001	1005	1029	1058	1086	1110	1140	1180	1214	1258	1368	0	0	0	0	0	0	0	0	0	1126
38	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1032	1065	1088	1113	1139	1171	1208	1263	1328	1424	0	0	0	0	0	0	0	0	1157
39	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1060	1089	1117	1139	1169	1206	1260	1325	1406	1468	0	0	0	0	0	0	0	1186
40	553	604	655	706	753	791	833	976	912	941	974	1001	1030	1062	1093	1085	1116	1145	1170	1205	1258	1321	1390	1438	1494	0	0	0	0	0	0	1215
41	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1117	1147	1176	1211	1264	1319	1381	1439	1465	1520	0	0	0	0	0	1246
42	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1152	1187	1218	1269	1329	1383	1430	1482	1528	1627	0	0	0	0	1294
43	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1186	1223	1276	1337	1396	1440	1481	1546	1637	1673	0	0	0	1347
44	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1230	1287	1349	1407	1453	1500	1554	1637	1710	1694	0	0	1408
45	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1300	1363	1425	1471	1507	1569	1648	1717	1750	1698	0	1453
46	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1375	1436	1493	1550	1570	1648	1717	1767	1777	0	1498
47	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1448	1494	1553	1587	1646	1719	1761	1794	1796	1542
48	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1511	1549	1611	1650	1709	1771	1788	1798	1569
49	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1510	1566	1606	1666	1709	1757	1801	1803	1567
50	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1510	1548	1614	1664	1713	1759	1793	1803	1559
51	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1510	1548	1588	1665	1720	1749	1794	1811	1562
52	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1510	1548	1588	1633	1708	1757	1774	1745	1515
53	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1510	1548	1588	1633	1676	1745	1791	1807	1494
54	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1510	1548	1588	1633	1676	1714	1776	1769	1468
55	553	604	655	706	753	791	833	976	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1510	1548	1588	1633	1676	1714	1747	1807	1459
56	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1510	1548	1588	1633	1676	1714	1747	1740	1379
57	553	604	655	706	753	791	933	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1510	1548	1588	1633	1676	1714	1747	1740	1415
58	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1510	1548	1588	1633	1676	1714	1747	1740	1325
59	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1510	1548	1588	1633	1676	1714	1747	1740	1239
60+	553	604	655	706	753	791	833	876	912	941	974	1001	1030	1062	1093	1122	1159	1196	1231	1274	1341	1407	1464	1510	1548	1588	1633	1676	1714	1747	1740	1319
AVG	534	584	633	684	731	759	796	827	862	888	922	951	989	1021	1055	1083	1117	1146	1179	1213	1266	1331	1397	1450	1497	1561	1646	1713	1763	1791	1800	745

NOTES: SALARY FIGURES INCLUDE OCT/1980 PAY INCREASE.
SALARY FIGURES HAVE NOT BEEN ADJUSTED.
AGE IS AGE NEAREST BIRTHDAY.

ALL DOD AVERAGE MONTHLY ACTIVE DUTY SALARIES BY ACTIVE YEARS OF SERVICE AND AGE FOR FY1980 VALUATION

YEARS OF ACTIVE SERVICE

AGE	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30+	ALL
16	520	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	520
17	505	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	505
18	522	561	537	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	524
19	529	574	605	675	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	546
20	536	581	622	656	723	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	576
21	541	585	630	673	719	787	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	611
22	545	592	635	692	724	750	773	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	647
23	635	673	642	698	730	752	789	874	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	684
24	629	715	761	696	732	754	790	821	787	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	726
25	635	708	835	855	748	763	795	822	960	979	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	[illegible]
26	741	719	815	941	978	774	798	822	859	899	840	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	834
27	741	843	802	928	1072	1037	818	832	863	890	953	1090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	891
28	741	843	921	994	1045	1112	1095	848	871	889	933	980	1403	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	936
29	741	843	921	972	992	1066	1182	1100	892	899	937	982	1015	1182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	976
30	741	843	921	972	1064	1001	1145	1257	1182	922	943	970	1022	1050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1023
31	741	843	921	972	1064	1105	1090	1234	1318	1223	986	975	1021	1064	1104	1533	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1075
32	741	843	921	972	1064	1105	1153	1196	1298	1395	1301	1012	1131	1059	1162	1141	1112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1124
33	741	843	921	972	1064	1105	1153	1226	1267	1405	1491	1330	1063	1064	1137	1140	1168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1187
34	741	843	921	972	1064	1105	1153	1226	1255	1358	1509	1526	1405	1139	1143	1126	1174	1183	1496	0	0	0	0	0	0	0	0	0	0	0	0	1246
35	741	843	921	972	1064	1105	1153	1226	1255	1343	1452	1522	1584	1492	1135	1148	1162	1204	1229	1359	0	0	0	0	0	0	0	0	0	0	0	1291
36	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1464	1535	1676	1555	1180	1180	1205	1240	1278	1567	0	0	0	0	0	0	0	0	0	0	1332
37	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1523	1710	1782	1550	1233	1205	1243	1280	1337	1671	0	0	0	0	0	0	0	0	0	1372
38	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1627	1795	1785	1608	1266	1240	1279	1353	1414	1667	0	0	0	0	0	0	0	0	1414
39	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1493	1527	1624	1736	1732	1778	1744	1287	1267	1341	1439	1499	1633	0	0	0	0	0	0	0	1474
40	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1673	1789	1889	1745	1339	1386	1436	1517	1552	1798	0	0	0	0	0	0	1573
41	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1764	1892	1873	1740	1469	1490	1516	1577	1554	1710	0	0	0	0	0	1676
42	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1849	1888	1948	2001	1594	1548	1550	1614	1626	1805	0	0	0	0	1774
43	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1869	1878	2158	2187	1684	1594	1604	1655	1722	1673	0	0	0	1844
44	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1911	2076	2289	2302	1743	1675	1677	1752	1816	1864	0	0	1932
45	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2109	2245	2405	2429	1860	1748	1784	1873	1845	1688	0	2022
46	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2237	2418	2499	2519	1996	1935	1426	1990	2044	2757	2164
47	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2376	2617	2744	2572	2129	2034	2044	2022	2331	2269
48	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2581	2746	2912	2802	2210	2151	2094	2395	2396
49	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2417	2585	2828	2723	2774	2274	2217	2583	2447
50	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2417	2448	2684	2820	2468	2375	2456	2672	2515
51	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2417	2448	2489	2649	2901	2974	2328	2806	2565
52	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2417	2448	2489	2468	2780	2927	3009	3246	2571
53	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2417	2448	2489	2468	2528	2745	2344	3393	2552
54	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2417	2448	2437	2468	2528	2537	2335	3502	2439
55	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2417	2448	2489	2468	2528	2537	2531	3535	2531
56	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2417	2448	2489	2468	2528	2534	2631	3508	2599
57	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2417	2448	2489	2468	2528	2534	2631	3508	2444
58	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2417	2448	2489	2466	2528	2534	2531	3503	2444
59	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2417	2448	2489	2469	2528	2537	2531	3508	2539
60+	741	843	921	972	1064	1105	1153	1226	1255	1343	1467	1499	1527	1624	1734	1690	1783	1862	1906	1939	2097	2218	2301	2417	2448	2489	2468	2528	2537	2531	3503	2403
AVG	541	594	647	707	786	819	869	915	956	1015	1092	1114	1156	1223	1290	1299	1363	1407	1435	1444	1579	1742	1853	1969	1996	2038	2165	2333	2404	2479	3133	889

NOTES: SALARY FIGURES INCLUDE OCT/1980 PAY INCREASE.
SALARY FIGURES HAVE NOT BEEN ADJUSTED.
AGE IS AGE NEAREST BIRTHDAY.

DMDC - DOD ACTUARY'S OFFICE

OFFICERS ACTIVE DUTY PERSONNEL BY YEARS OF SERVICE AND AGE FOR FY1980 VALUATION

YEARS OF ACTIVE SERVICE

AGE	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	9	15	9	4	0	0	0	0	0	0	0	0	0	0	0	0
21	126	25	30	22	8	1	0	0	0	0	0	0	0	0	0	0
22	3541	355	86	108	39	5	0	0	0	0	0	0	0	0	0	0
23	4660	4 04	259	120	55	33	3	1	0	0	0	0	0	0	0	0
24	2668	5394	4425	274	92	95	48	5	0	0	0	0	0	0	0	0
25	1645	2982	5172	5972	293	120	115	70	8	2	0	0	0	0	0	0
26	1436	1762	2729	4753	3562	242	155	152	110	18	0	0	0	0	0	0
27	1137	1555	1522	2765	4199	2822	298	224	262	122	18	1	0	0	0	0
28	810	1214	1311	1432	2322	3382	2862	314	452	293	101	12	1	0	0	0
29	544	743	941	1104	1246	1944	3158	2417	398	451	355	147	12	1	0	0
30	428	526	540	771	998	1030	1820	3009	2350	469	556	404	152	9	0	0
31	344	401	385	484	644	805	992	1810	2912	2449	629	660	538	158	15	2
32	236	248	262	290	446	593	786	1002	1768	3212	2275	734	937	496	221	31
33	218	189	196	188	264	384	567	696	1033	2153	3198	2378	860	901	654	366
34	197	167	175	147	210	274	316	492	657	1129	2255	3395	2690	817	1128	580
35	102	90	1 0	107	133	161	173	234	327	434	798	1569	2542	1837	778	447
36	68	83	96	73	111	126	148	116	189	310	456	773	1765	2521	1912	490
37	58	62	63	51	101	83	98	112	106	192	273	479	926	1831	2627	1516
38	44	33	53	46	63	61	53	53	82	106	166	222	498	969	1832	1960
39	40	32	41	44	48	44	48	43	73	63	98	102	216	467	791	1061
40	35	27	33	36	39	41	42	41	42	40	48	76	110	204	400	454
41	24	24	33	34	40	24	23	28	35	38	59	29	68	101	190	263
42	14	24	33	21	19	27	30	25	13	33	41	53	47	64	119	165
43	8	18	20	18	27	17	17	12	9	28	28	38	46	55	83	71
44	8	18	19	18	24	23	23	13	10	22	28	36	26	43	61	67
45	8	9	15	10	12	24	8	13	12	14	28	26	25	32	52	50
46	8	15	8	13	8	11	12	7	8	9	15	26	22	37	55	48
47	5	7	16	6	11	13	10	9	7	9	9	18	25	28	42	33
48	8	7	7	5	9	8	9	6	8	4	6	15	12	25	34	25
49	3	9	22	5	5	7	6	4	3	7	11	10	11	22	29	24
50	5	8	7	7	11	7	8	4	8	4	9	10	8	18	30	20
51	2	7	4	5	7	10	5	5	4	3	4	4	8	10	15	18
52	4	8	8	8	5	12	1	3	2	1	6	4	7	8	10	9
53	4	1	11	7	8	8	9	1	5	5	1	2	3	5	16	9
54	4	4	11	6	5	6	10	4	1	1	3	4	2	6	8	12
55	4	2	2	5	4	6	6	5	2	2	1	1	1	2	3	2
56	0	4	1	7	7	3	8	8	3	1	3	1	4	1	3	2
57	1	5	3	1	5	10	3	4	3	4	2	2	4	3	1	1
58	0	3	0	1	3	4	4	3	5	4	2	0	3	4	0	1
59	2	5	1	2	2	4	5	2	2	2	2	1	2	1	0	1
60+	1	1	0	0	3	3	1	1	3	4	0	2	1	1	1	2
TOT	18460	20884	18669	16970	14987	12473	11880	10948	10912	11638	11494	11234	11572	10677	11110	7730

NOTES: NUMBERS HAVE BEEN ADJUSTED TO BUDGET.
AGE IS AGE NEAREST BIRTHDAY.

DMDC - DOD ACTUARY' OFFICE

OFFICERS ACTIVE DUTY PERSONNEL BY YEARS OF SERVICE AND AGE FOR FY1980 VALUATION

PAGE 2 OF 2

	YEARS OF ACTIVE SERVICE														
AGE	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30+	TOTAL
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	212
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4133
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9935
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13001
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14380
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14919
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14925
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14506
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13461
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12962
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13228
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13537
33	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14292
34	429	59	1	0	0	0	0	0	0	0	0	0	0	0	0	15118
35	411	387	54	2	0	0	0	0	0	0	0	0	0	0	0	10706
36	431	590	405	81	2	0	0	0	0	0	0	0	0	0	0	10823
37	542	461	713	618	87	5	0	0	0	0	0	0	0	0	0	11004
38	1891	481	568	895	599	48	4	0	0	0	0	0	0	0	0	10727
39	2000	1659	458	634	601	408	45	2	0	0	0	0	0	0	0	8988
40	1182	2145	1763	518	486	508	342	45	7	0	0	0	0	0	0	8664
41	497	1453	2448	1404	399	420	407	273	34	3	0	0	0	0	0	8351
42	293	619	1587	1955	1150	340	293	250	262	41	2	0	0	0	0	7520
43	162	307	638	1254	1426	1042	257	191	247	209	21	0	0	0	0	6249
44	94	198	304	533	830	1206	735	177	181	249	136	8	1	0	0	5091
45	58	90	190	286	392	619	970	617	184	193	184	64	15	0	0	4200
46	41	85	122	184	223	277	549	910	555	246	215	119	89	15	1	3933
47	54	53	65	120	119	150	198	468	675	471	205	184	119	46	6	3181
48	52	57	80	88	102	99	114	216	363	636	371	206	142	97	50	2861
49	35	51	38	88	67	59	86	102	170	334	448	344	148	129	92	2369
50	23	33	41	51	35	45	49	64	69	138	237	308	340	185	137	1919
51	22	24	38	48	41	37	39	34	53	87	118	161	237	274	112	1436
52	14	23	32	44	28	31	18	27	28	42	47	73	122	235	215	1075
53	6	14	25	24	15	20	11	15	10	12	19	23	49	74	228	640
54	11	13	15	23	14	15	10	11	10	10	8	13	24	19	151	434
55	10	4	5	8	5	12	6	10	7	7	7	12	8	10	126	285
56	6	7	6	5	4	10	3	10	2	3	8	8	3	6	97	234
57	1	7	1	7	4	2	3	3	3	6	5	5	5	5	61	170
58	1	4	4	7	2	0	1	5	4	4	2	6	4	1	40	122
59	1	1	1	4	1	2	0	3	3	6	4	4	2	2	39	107
60+	1	2	2	0	2	0	2	0	3	3	5	3	2	4	38	91
TOT	8315	8827	9684	8851	6634	5355	4142	3433	2870	2700	2042	1541	1310	1102	1393	279827

NOTES: NUMBERS HAVE BEEN ADJUSTED TO BUDGET.
AGE IS AGE NEAREST BIRTHDAY.

DMDC - DOD ACTUARY' OFFICE

ENLISTED ACTIVE DUTY PERSONNEL BY YEARS OF SERVICE AND AGE FOR FY1980 VALUATION

	YEARS OF ACTIVE SERVICE															
AGE	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	3473	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	62785	3092	1	0	0	0	0	0	0	0	0	0	0	0	0	0
19	94646	52787	2176	6	0	0	0	0	0	0	0	0	0	0	0	0
20	64815	80207	46100	2068	3	0	0	0	0	0	0	0	0	0	0	0
21	36005	50930	69337	38597	1251	7	0	0	0	0	0	0	0	0	0	0
22	21671	27452	44162	57216	17196	553	7	0	0	0	0	0	0	0	0	0
23	14907	17261	24541	37995	27365	11748	828	3	0	0	0	0	0	0	0	0
24	10090	11488	14590	21094	19405	19786	10155	547	1	0	0	0	0	0	0	0
25	6977	7797	9663	12834	12005	15175	16170	8346	628	4	0	0	0	0	0	0
26	4627	5226	6536	8743	8259	9904	12459	14564	6387	395	3	0	0	0	0	0
27	3115	3586	4559	5822	5927	6922	8050	11675	12272	4828	210	2	0	0	0	0
28	2242	2293	2861	3976	3765	4901	5294	8278	12757	9748	2584	173	0	0	0	0
29	1495	1731	2091	2684	2656	3444	3921	5177	6877	11474	6453	2240	180	1	0	0
30	942	1034	1459	1709	1855	2583	2717	3101	3938	7297	8603	6760	2072	143	0	0
31	619	617	865	1207	1293	1749	1962	2163	2677	3998	5470	10037	7090	1749	169	1
32	433	438	531	765	915	1098	1366	1598	1928	2526	3155	6667	10259	5894	2176	270
33	295	313	423	547	652	916	1027	1098	1405	1730	2043	3517	6657	8147	6254	3410
34	239	177	295	470	502	567	863	852	1109	1243	1399	2340	3667	4922	7837	6567
35	148	133	156	211	281	352	444	442	595	683	708	1154	1751	2071	3766	4252
36	56	109	142	140	219	272	330	336	419	443	527	773	1231	1440	1998	3525
37	6	33	105	118	150	195	253	226	309	336	341	530	885	944	1206	1988
38	11	4	28	90	114	144	179	192	207	228	195	322	558	731	835	1180
39	4	6	3	21	87	100	107	115	157	133	142	184	292	463	543	634
40	4	7	6	8	22	65	93	67	101	94	94	117	191	246	350	448
41	1	3	3	7	5	19	64	41	55	78	79	65	112	155	232	325
42	4	1	2	4	3	4	8	32	40	33	43	51	81	91	112	221
43	2	1	2	1	5	1	11	12	33	24	20	28	65	69	97	155
44	0	3	5	4	4	3	3	4	18	10	11	15	37	51	66	96
45	1	2	1	4	2	1	7	3	2	6	13	20	23	32	46	86
46	0	1	1	2	1	0	0	2	4	4	3	7	16	21	27	49
47	0	1	0	2	1	1	3	3	0	7	4	3	11	11	23	22
48	0	2	1	0	1	1	0	1	2	1	1	2	4	3	15	21
49	1	0	0	1	0	1	4	3	1	2	2	4	6	10	17	16
50	0	0	0	5	0	0	6	4	5	1	0	5	2	4	9	26
51	1	1	0	0	0	0	0	1	1	1	1	3	5	2	7	6
52	0	3	2	0	0	1	1	1	2	0	3	0	0	3	7	11
53	0	0	0	0	0	0	4	0	0	1	1	1	3	1	6	6
54	0	1	0	1	1	5	0	0	2	0	1	4	1	0	4	2
55	0	0	0	0	0	1	1	7	3	2	2	1	1	3	1	2
56	0	0	0	0	0	5	1	1	0	2	1	0	0	1	0	3
57	0	0	0	1	2	0	1	0	2	1	1	2	1	1	1	2
58	0	1	0	0	1	3	0	1	1	1	0	2	1	2	1	0
59	1	0	0	0	0	1	0	1	0	1	0	0	0	1	4	0
60+	3	0	0	0	0	0	0	0	1	0	0	1	3	0	2	1
TOT	329601	266746	230627	196352	103948	80528	66339	58897	51939	45335	32113	35030	35205	27212	25811	23325

NOTES: NUMBERS HAVE BEEN ADJUSTED TO BUDGET.
AGE IS AGE NEAREST BIRTHDAY.

DMDC - DOD ACTUARY' OFFICE

ENLISTED ACTIVE DUTY PERSONNEL BY YEARS OF SERVICE AND AGE FOR FY1980 VALUATION

YEARS OF ACTIVE SERVICE

AGE	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30+	TOTAL
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3473
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65878
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149615
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	193193
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	196127
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	168257
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	134648
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107156
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89599
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77103
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66968
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58877
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50414
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44192
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41666
32	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40020
33	413	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38837
34	4154	570	0	0	0	0	0	0	0	0	0	0	0	0	0	37773
35	4707	3900	513	5	0	0	0	0	0	0	0	0	0	0	0	26272
36	3998	5401	4759	638	2	0	0	0	0	0	0	0	0	0	0	27258
37	3285	4768	7060	5629	580	1	0	0	0	0	0	0	0	0	0	28948
38	2566	2936	5811	8070	3823	266	3	0	0	0	0	0	0	0	0	28493
39	1623	1681	3211	5625	4664	1960	223	6	0	0	0	0	0	0	0	21984
40	926	1453	2095	3262	2936	2674	1451	178	4	0	0	0	0	0	0	16892
41	458	989	2067	1966	1601	1814	1775	1039	194	6	0	0	0	0	0	13173
42	303	515	1324	1530	917	1033	1268	1253	1099	223	5	0	0	0	0	10200
43	186	298	602	1224	756	634	751	919	1238	1131	130	1	0	0	0	8396
44	127	206	316	528	579	590	461	542	803	1292	662	39	2	0	0	6477
45	94	151	224	380	288	365	468	344	474	921	855	206	56	1	0	5076
46	72	91	132	234	201	186	264	422	271	514	609	327	207	31	0	3699
47	56	65	91	151	116	135	117	145	169	241	343	439	261	131	5	2557
48	60	64	67	92	81	72	88	83	86	112	120	314	291	212	36	1833
49	31	37	67	84	60	66	58	60	79	78	112	152	220	225	44	1441
50	21	36	54	48	46	43	41	47	46	56	76	78	134	192	58	1043
51	11	20	37	55	37	27	33	25	40	57	52	50	70	145	43	731
52	14	25	27	28	24	29	21	27	24	22	36	30	55	82	20	498
53	6	13	16	30	21	13	17	21	11	18	16	17	26	36	17	301
54	10	14	11	11	14	11	10	19	17	18	17	16	15	20	11	235
55	11	7	6	7	5	4	8	3	5	12	10	9	18	12	11	152
56	6	3	4	7	5	3	6	1	1	3	2	6	3	4	4	72
57	2	5	2	3	4	1	4	2	1	0	5	4	3	1	10	62
58	1	2	4	1	3	0	2	2	0	1	1	3	1	2	4	41
59	2	2	1	3	0	1	0	0	0	0	0	1	0	0	2	21
60+	7	4	6	2	1	2	1	0	1	1	1	2	0	1	6	46
TOT	23151	23756	28507	29633	16764	9930	7070	5137	4563	4706	3052	1694	1362	1095	271	1769699

NOTES: NUMBERS HAVE BEEN ADJUSTED TO BUDGET.
AGE IS AGE NEAREST BIRTHDAY.

DMDC - DOD ACTUARY• OFFICE

ALL DOD ACTIVE DUTY PERSONNEL BY YEARS OF SERVICE AND AGE FOR FY1980 VALUATION

YEARS OF ACTIVE SERVICE

AGE	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	3473	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	62785	3092	1	0	0	0	0	0	0	0	0	0	0	0	0	0
19	94646	52788	2176	6	0	0	0	0	0	0	0	0	0	0	0	0
20	64824	80222	46109	2072	3	0	0	0	0	0	0	0	0	0	0	0
21	36131	50955	69367	38619	1259	8	0	0	0	0	0	0	0	0	0	0
22	25212	27707	44248	57324	17234	558	7	0	0	0	0	0	0	0	0	0
23	19567	22065	24800	38115	27420	11781	831	4	0	0	0	0	0	0	0	0
24	12758	16882	19015	21368	19497	19881	10203	552	1	0	0	0	0	0	0	0
25	8623	10779	14835	16806	12299	15295	16285	8416	636	6	0	0	0	0	0	0
26	6063	6988	9265	13496	11821	10146	12614	14716	6497	413	3	0	0	0	0	0
27	4252	5141	6081	8587	10126	9744	8348	11899	12534	4950	228	3	0	0	0	0
28	3052	3512	4172	5408	6087	8283	8156	8592	13209	10041	2685	185	1	0	0	0
29	2029	2474	3032	3738	3902	5388	7079	7594	7275	11925	6808	2387	192	2	0	0
30	1370	1360	1979	2479	2753	3613	4537	6110	6288	7766	9159	7164	2224	152	0	0
31	963	1018	1250	1691	1937	2554	2954	3973	5589	6447	6099	10697	7628	1907	184	3
32	669	586	793	1055	1361	1691	2152	2600	3696	5738	5430	7401	11196	6390	2397	301
33	503	502	619	735	916	1300	1594	1794	2438	3883	5241	5695	7517	9048	6908	3776
34	436	344	470	617	712	841	1179	1344	1766	2372	3654	5735	6357	5739	8965	7147
35	250	223	276	318	414	513	617	676	922	1117	1506	2723	4293	3908	4544	4699
36	124	189	238	213	330	398	478	452	608	753	983	1546	2996	3961	3910	4015
37	64	95	168	169	251	278	351	338	415	528	614	1009	1811	2775	3833	3504
38	55	37	81	136	177	205	232	245	289	334	361	544	1056	1700	2667	3140
39	44	38	44	65	135	144	155	158	230	196	240	286	508	930	1334	1695
40	39	34	39	44	61	106	135	108	143	134	142	193	301	450	750	902
41	25	27	36	41	45	43	87	69	90	116	138	94	180	256	422	588
42	18	25	35	25	22	31	38	57	53	66	84	104	128	155	231	386
43	10	19	22	19	32	18	28	24	42	52	48	66	111	124	180	226
44	8	21	24	22	28	26	26	17	28	32	39	51	63	94	127	163
45	9	11	16	14	14	25	15	16	14	20	41	46	48	64	98	136
46	8	16	9	15	9	11	12	9	12	13	18	33	38	58	82	97
47	5	8	16	8	12	14	13	12	7	16	13	21	36	39	65	55
48	8	9	8	5	10	9	9	7	10	5	7	17	16	28	49	46
49	4	9	12	6	5	8	10	7	4	9	13	14	17	32	46	40
50	5	8	7	12	11	7	14	8	13	5	9	15	10	22	39	40
51	3	8	4	5	7	10	5	6	5	4	5	7	13	12	22	24
52	4	11	10	8	5	13	2	4	4	1	9	4	7	11	17	20
53	4	1	11	7	8	8	13	1	5	6	2	3	6	6	22	15
54	4	5	11	7	6	11	10	4	3	1	4	8	3	6	12	14
55	4	2	2	5	4	7	7	12	5	4	3	2	2	5	4	4
56	0	4	1	7	7	8	9	9	3	3	4	1	4	2	3	5
57	1	5	3	2	7	10	4	4	5	5	3	4	5	4	2	3
58	0	4	0	1	4	7	4	4	6	5	2	2	4	6	1	1
59	3	5	1	2	2	5	5	3	2	3	2	1	2	2	4	1
60+	4	1	0	0	3	3	1	1	4	4	0	3	4	1	3	3
TOT	348061	287630	249296	213322	118935	93001	78219	69845	62851	56973	43597	46264	46777	37889	36921	31055

NOTES: NUMBERS HAVE BEEN ADJUSTED TO BUDGET.
AGE IS AGE NEAREST BIRTHDAY.

DMDC - DOD ACTUARY, OFFICE

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          ALL DOD ACTIVE DUTY PERSONNEL BY YEARS OF SERVICE AND AGE FOR FY1980 VALUATION                    PAGE 2 OF 2
                                                          YEARS OF ACTIVE SERVICE
AGE       16      17      18      19      20      21      22      23      24      25      26      27      28      29     30+   TOTAL

16         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       2
17         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0    3473
18         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0   65878
19         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0  149616
20         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0  193230

21         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0  196339
22         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0  172390
23         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0  144583
24         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0  120157
25         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0  103979

26         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0   92022
27         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0   81893
28         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0   73383
29         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0   63875
30         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0   57154

31         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0   54894
32         1       0               0       0       0       0       0       0       0       0       0       0       0       0   53557
33       460       0       0       0       0       0       0       0       0       0       0       0       0       0       0   53129
34      4583     629       1       0       0       0       0       0       0       0       0       0       0       0       0   52891
35      5118    4287     567       7       0       0       0       0       0       0       0       0       0       0       0   36978

36      4429    6491    5244     719       4       0       0       0       0       0       0       0       0       0       0   38081
37      3827    5229    7773    6247     667       6       0       0       0       0       0       0       0       0       0   39952
38      4457    3417    6379    9965    4422     314       7       0       0       0       0       0       0       0       0   39220
39      3623    3340    3669    6229    5265    2368     268       8       0       0       0       0       0       0       0   30972
40      2108    3598    3858    3780    3422    3182    1793     223      11       0       0       0       0       0       0   25556

41       955    2442    4515    3390    2000    2234    2182    1312     228       9       0       0       0       0       0   21524
42       596    1134    2911    3485    2067    1373    1561    1503    1361     264       7       0       0       0       0   17720
43       348     605    1240    2478    2182    1676    1008    1110    1485    1340     151       1       0       0       0   14645
44       221     404     620    1061    1409    1796    1196     719     984    1541     798      47       3       0       0   11568
45       152     241     414     666     680     984    1438     961     658    1114    1039     270      71       1       0    9276

46       113     176     254     418     424     463     813    1332     826     760     824     446     296      46       1    7632
47       110     118     156     271     235     285     315     613     844     712     548     623     380     177      11    5738
48       112     121     147     180     183     171     202     299     449     748     491     520     433     309      86    4694
49        66      88     105     172     127     125     144     162     249     412     560     496     368     354     136    3810
50        44      69      95      99      81      88      90     111     115     194     313     386     474     377     195    2962

51        33      44      75     103      78      64      72      59      93     144     170     211     307     419     155    2167
52        28      46      59      72      52      60      39      54      52      64      83     103     177     317     235    1573
53        12      27      41      54      36      33      28      36      21      30      35      40      75     110     245     941
54        21      27      26      34      28      26      20      29      27      28      25      29      39      39     162     669
55        21      11      11      15      10      16      14      13      12      19      17      21      26      22     137     437

56        12      10      10      12       9      13       9      11       3       6      10      14       6      10     101     306
57         3      12       3      10       8       3       7       5       4       6      10       9       8       6      71     232
58         2       6       8       8       5       0       3       7       4       5       3       9       5       3      44     163
59         3       3       2       7       1       3       0       3       3       6       4       5       2       2      41     128
60+        8       6       8       2       3       2       3       0       4       4       6       5       2       5      44     137

TOT    31456   32583   38191   34484   23398   15285   11212    8570    7433    7406    5094    3235    2672    2197    1664 2049526

NOTES:  NUMBERS HAVE BEEN ADJUSTED TO BUDGET.
        AGE IS AGE NEAREST BIRTHDAY.                                                             DMDC - DOD ACTUARY' OFFICE
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RETIRED MILITARY VALUATION DATA AS OF END FY 1980

(ALL OFFICERS)

	STRENGTH					AVERAGE ANNUAL NET RETIRED PAY				
AGE	NON-DISABLED	PERM DISABLED	TEMP DISABLED	TITLE III	TOTAL	NON-DISABLED	PERM DISABLED	TEMP DISABLED	TITLE III	TOTAL
16	0	0	0	0	0	0	0	0	0	0
17	0	1	0	0	1	0	16764	0	0	16764
18	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0
23	0	2	1	0	3	0	6996	3516	0	5836
24	0	0	5	0	5	0	0	7150	0	7150
25	0	1	9	0	9	0	8916	8433	0	8487
26	0	5	23	0	28	0	2760	8681	0	7624
27	0	12	30	0	42	0	4802	9138	0	7899
28	0	17	35	0	52	0	5683	9886	0	8512
29	0	26	40	0	66	0	7408	9938	0	8941
30	0	55	35	0	90	0	6863	11117	0	8517
31	0	94	40	0	134	0	8120	10967	0	8970
32	0	143	28	0	171	0	8672	12036	0	9223
33	0	283	44	0	327	0	8362	13293	0	9026
34	0	407	41	0	448	0	8902	11902	0	9176
35	10	345	29	0	384	18300	9139	12543	0	9635
36	8	341	23	0	372	17870	9383	13671	0	9835
37	39	350	27	0	416	12955	9773	14926	0	10406
38	260	390	28	0	678	12361	9864	14333	0	11006
39	724	292	34	0	1050	12548	10375	15703	0	12046
40	1334	308	38	0	1680	12824	10805	15546	0	12516
41	1736	239	32	0	2007	13387	11534	16990	0	13223
42	2425	273	40	0	2738	13902	11442	17472	0	13709
43	3374	266	34	0	3674	14752	12689	20015	0	14651
44	4440	308	27	0	4775	15355	12573	20378	0	15204
45	5285	292	32	0	5609	16027	13566	19116	0	15916
46	6356	344	41	0	6741	16941	13619	20715	0	16795
47	7122	377	45	0	7544	17618	14685	20315	0	17487
48	8049	445	31	0	8525	18387	14523	20623	0	18199
49	8590	565	26	0	9181	19967	14778	26590	0	18731
50	9395	635	39	0	10069	19411	15350	23722	0	19172
51	9453	704	31	0	10189	19854	15330	24976	0	19557
52	8434	725	22	0	9181	20383	16031	33030	0	20070
53	6601	604	20	0	7225	20901	16374	25080	0	20534
54	5961	600	8	0	6569	21364	16398	37944	0	20986
55	6925	756	7	0	7698	21990	17165	33669	0	21526
56	8663	1145	11	0	9819	21794	15395	35287	0	21063
57	9741	1721	9	0	11471	21490	15037	35579	0	20533
58	10787	2192	0	0	12979	20900	14113	0	0	19753
59	13358	3046	0	0	16404	20336	13650	0	0	19094
60	14000	3672	0	3961	21633	19659	13534	0	6876	16287
61	13447	3554	0	9870	26871	19208	13714	0	7107	14036
62	12677	3798	0	9105	25580	18781	13685	0	7312	13942
63	11296	3495	0	8048	22839	18342	13953	0	7414	13820
64	9562	2978	0	7408	19948	18085	13705	0	7581	13530
65	8073	2591	0	6496	17159	17931	13706	0	7963	13520
66	6478	2138	0	5654	14270	17613	13145	0	8404	13295
67	5288	1897	0	4725	11910	17520	13050	0	8512	13234
68	4521	1456	0	4379	10356	17597	13384	0	8376	13105
69	4172	1449	0	4161	9782	17399	13797	0	8097	12904
70	3697	1316	0	3866	8879	17155	13401	0	7887	12563

RETIRED MILITARY VALUATION DATA AS OF END FY 1980

(ALL OFFICERS)

AGE	STRENGTH NON-DISABLED	STRENGTH PERM DISABLED	STRENGTH TEMP DISABLED	STRENGTH TITLE III	STRENGTH TOTAL	AVERAGE ANNUAL NET RETIRED PAY NON-DISABLED	AVERAGE ANNUAL NET RETIRED PAY PERM DISABLED	AVERAGE ANNUAL NET RETIRED PAY TEMP DISABLED	AVERAGE ANNUAL NET RETIRED PAY TITLE III	AVERAGE ANNUAL NET RETIRED PAY TOTAL
71	3207	1163	0	3465	7835	17229	13437	0	7584	12401
72	2994	1030	0	3233	7257	17206	13099	0	7166	12150
73	2610	934	0	2961	6505	17175	12909	0	7003	11932
74	2157	827	0	2609	5593	16722	13457	0	7180	11788
75	1363	649	0	2117	4669	17012	13359	0	7002	11934
76	1661	619	0	1869	4149	16984	13377	0	7023	11959
77	1329	549	0	1595	3473	17315	12961	0	6946	11864
78	1180	430	0	1225	2835	17003	13969	0	6593	12045
79	962	361	0	956	2279	17117	13160	0	6918	12212
80	846	346	0	858	2050	17025	13459	0	6893	12182
81	610	281	0	737	1628	17326	13260	0	6985	11943
82	520	272	0	631	1423	17872	14268	0	7013	12368
83	394	234	0	571	1199	19064	14730	0	7250	12592
84	303	166	0	522	991	19292	14881	0	7471	12327
85	287	185	0	488	960	19650	16971	0	7537	12976
86	219	163	0	415	797	20402	17135	0	7255	12888
87	174	118	0	275	567	21311	17170	0	7167	13589
88	144	124	0	218	486	20754	17890	0	7078	13889
89	132	90	0	155	377	20209	17267	0	6769	13981
90	71	75	0	114	260	18256	17597	0	6858	13068
91	63	40	0	90	193	19221	16446	0	7365	13117
92	37	44	0	63	144	19844	17928	0	6571	13421
93	31	30	0	54	115	16330	18406	0	6152	12109
94	17	21	0	27	65	20850	19725	0	6518	14533
95	10	21	0	8	39	17617	20242	0	7959	17049
96	7	5	0	12	24	18830	18617	0	5257	11999
97	6	7	0	4	17	18344	21396	0	4716	16394
98	5	2	0	3	10	12530	27144	0	4152	12940
99	2	3	0	1	6	25236	29460	0	8184	24506
100	1	1	0	1	3	20004	16836	0	3300	13380
101	4	0	0	0	4	20859	0	0	0	20859
102	7	0	0	0	7	21543	0	0	0	21543
103	4	0	0	1	5	21030	0	0	6264	18077
104	5	1	0	3	9	20938	10068	0	6568	14940
105	5	0	0	0	5	15242	0	0	0	15242
106	3	0	0	2	5	27776	0	0	10356	20808
107	5	0	0	2	7	22553	0	0	4302	17338
108	6	0	0	2	8	17532	0	0	6678	14819
109	0	0	0	0	0	0	0	0	0	0
110	1	0	0	1	2	14604	0	0	6444	10524
TOT	254163	55474	964	92961	403562	18835	13697	17140	7532	15521
65+	54111	19668	0	54569	128348	17495	13600	0	7703	12735

NOTE: AGE IS RETIREE'S CURRENT AGE TO NEAREST BIRTHDAY AT END OF FISCAL YEAR.
65+ IS TOTAL AGE 65 AND OVER.
FIGURES ADJUSTED TO BUDGET.

DMDC - DOD ACTUARY'S OFFICE

RETIRED MILITARY VALUATION DATA AS OF END FY 1980

(ALL ENLISTED)

AGE	STRENGTH: NON-DISABLED	STRENGTH: PERM DISABLED	STRENGTH: TEMP DISABLED	STRENGTH: TITLE III	STRENGTH: TOTAL	AVERAGE ANNUAL NET RETIRED PAY: NON-DISABLED	AVERAGE ANNUAL NET RETIRED PAY: PERM DISABLED	AVERAGE ANNUAL NET RETIRED PAY: TEMP DISABLED	AVERAGE ANNUAL NET RETIRED PAY: TITLE III	AVERAGE ANNUAL NET RETIRED PAY: TOTAL
16	0	1	0	0	1	0	3216	0	0	3216
17	0	0	0	0	0	0	0	0	0	0
18	0	0	13	0	13	0	0	4115	0	4115
19	0	5	78	0	83	0	3538	3739	0	3727
20	0	21	280	0	301	0	3017	3528	0	3492
21	0	78	614	0	692	0	2598	3607	0	3493
22	0	165	822	0	987	0	2302	3726	0	3488
23	0	311	893	0	1204	0	2541	3813	0	3485
24	0	444	860	0	1304	0	2567	4016	0	3523
25	0	631	717	0	1348	0	2879	4048	0	3501
26	0	828	618	0	1446	0	2833	4304	0	3462
27	0	921	515	0	1436	0	2913	4368	0	3435
28	0	1126	461	0	1587	0	2910	4644	0	3414
29	0	1180	373	0	1553	0	2922	4782	0	3369
30	0	1608	326	0	1934	0	2766	4848	0	3117
31	0	2039	245	0	2284	0	2576	4950	0	2831
32	0	2485	242	0	2727	0	2578	5346	0	2823
33	0	2726	200	0	2926	0	2673	5619	0	2874
34	0	2453	194	0	2647	0	2784	6001	0	3019
35	85	1597	127	0	1809	7918	2914	6311	0	3388
36	108	1444	98	0	1650	7651	3154	6057	0	3621
37	816	1374	110	0	2300	7463	3347	7191	0	4991
38	4171	1382	156	0	5709	7401	3574	7188	0	6469
39	9121	1243	162	0	10526	7460	4016	7879	0	7060
40	13820	1162	173	0	15155	7591	4482	7847	0	7356
41	18372	1158	153	0	19683	7718	4687	8781	0	7548
42	23679	1356	126	0	25161	7900	5063	9180	0	7754
43	28874	1491	117	0	30482	8128	5365	8926	0	7996
44	32059	1673	104	0	33836	8346	5598	8880	0	8212
45	34437	1691	82	0	36210	8497	5762	10106	0	8373
46	35430	1930	60	0	37420	8602	5772	10240	0	8459
47	35304	2230	73	0	37607	8760	6100	11609	0	8608
48	37953	2769	49	0	40771	8878	5923	11643	0	8680
49	39829	3311	49	0	43189	8888	6055	10694	0	8673
50	44822	3793	37	0	48652	8802	6046	11221	0	8589
51	44177	3923	29	0	48129	8726	6163	11469	0	8518
52	37960	3640	28	0	41628	8653	6313	12310	0	8451
53	32711	3279	25	0	36015	8520	6265	10040	0	8316
54	27114	2443	12	0	29569	8283	6649	11500	0	8149
55	25547	2245	6	0	27798	8145	6948	15264	0	8050
56	25010	2283	6	0	27299	8143	7198	14836	0	8065
57	23480	2134	6	0	25620	8051	7296	10112	0	7988
58	22060	2010	0	0	24070	7995	7672	0	0	7968
59	22255	2073	0	0	24328	7905	7815	0	0	7897
60	19934	1906	0	1057	22897	7830	7916	0	4214	7670
61	18479	1846	0	3009	23334	7854	8418	0	4187	7426
62	15672	1590	0	2393	19655	7718	8290	0	4217	7338
63	12807	1376	0	1970	16153	7644	8299	0	4169	7276
64	10245	1151	0	1689	13085	7565	8142	0	4197	7181
65	8734	981	0	1667	11382	7429	8011	0	4395	7035
66	7077	851	0	1371	9299	7351	7903	0	4475	6977
67	5519	727	0	1057	7303	7194	7512	0	4472	6832
68	4389	537	0	973	5899	7041	7370	0	4276	6615
69	3701	437	0	804	4942	6987	7089	0	4125	6530
70	3290	389	0	675	4354	6872	7219	0	4026	6461

RETIRED MILITARY VALUATION DATA AS OF END FY 1980

(ALL ENLISTED)

	STRENGTH					AVERAGE ANNUAL NET RETIRED PAY				
AGE	NON-DISABLED	PERM DISABLED	TEMP DISABLED	TITLE III	TOTAL	NON-DISABLED	PERM DISABLED	TEMP DISABLED	TITLE III	TOTAL
71	2613	295	0	614	3522	6800	6756	0	3838	6280
72	2357	275	0	539	3171	6791	6929	0	3623	6254
73	2069	236	0	439	2744	6672	6503	0	3552	6158
74	1615	201	0	322	2138	6709	6229	0	3458	6174
75	1353	206	0	220	1779	6717	6377	0	3389	6266
76	1135	182	0	194	1511	6798	6370	0	3347	6304
77	966	183	0	166	1315	6913	6375	0	3269	6378
78	827	206	0	113	1146	6972	6542	0	2905	6493
79	773	171	0	90	1034	6930	6460	0	2913	6503
80	700	173	0	83	956	6930	6224	0	2973	6459
81	644	165	0	74	883	7023	6214	0	2866	6524
82	484	140	0	52	676	7041	6546	0	2942	6623
83	353	113	0	47	513	6861	6160	0	3080	6360
84	290	99	0	30	419	6923	5730	0	2790	6345
85	258	85	0	35	378	7351	6460	0	3113	6758
86	194	64	0	33	291	7166	5614	0	2756	6325
87	140	35	0	21	196	7241	5807	0	3406	6574
88	126	36	0	17	179	7407	6106	0	3364	6761
89	89	23	0	9	120	6692	6617	0	2321	6350
90	6	17	0	2	88	7306	6291	0	3522	7024
91	65	10	0	4	79	7054	6594	0	3744	6828
92	40	14	0	2	56	7174	6386	0	3396	6842
93	30	4	0	0	34	7346	6951	0	0	7299
94	39	4	0	0	43	6804	4221	0	0	6564
95	17	7	0	0	24	7093	3953	0	0	6815
96	10	6	0	0	16	8519	4572	0	0	7039
97	10	4	0	0	14	6565	2979	0	0	5541
98	8	1	0	1	10	8144	1836	0	6576	7356
99	2	0	0	0	2	7392	0	0	0	7392
100	3	2	0	0	5	8544	2022	0	0	5935
101	13	2	0	1	16	7089	3846	0	4596	6528
102	13	1	0	1	15	9568	8064	0	5748	9213
103	17	1	0	1	19	9437	4992	0	4032	8919
104	31	3	0	1	35	8222	4028	0	4644	7760
105	15	3	0	0	18	9222	7252	0	0	8894
106	21	2	0	3	26	9569	5934	0	3852	8629
107	21	1	0	2	24	8142	10500	0	2982	7810
108	31	1	0	1	33	7937	6876	0	6000	7847
109	34	1	0	1	36	9556	15000	0	4548	8624
110	7	0	0	0	7	8275	0	0	0	8275
TOT	746522	85419	9239	19783	860963	8249	5567	5698	4125	7855
65+	50191	6894	0	9665	66750	7091	7097	0	4052	6652

NOTE: AGE IS RETIREE'S CURRENT AGE TO NEAREST BIRTHDAY AT END OF FISCAL YEAR.
65+ IS TOTAL AGE 65 AND OVER.
FIGURES ADJUSTED TO BUDGET.

DMDC - DOD ACTUARY'S OFFICE

RETIRED MILITARY VALUATION DATA AS OF END FY 1980

(ALL DOD)

	STRENGTH					AVERAGE ANNUAL NET RETIRED PAY				
AGE	NON-DISABLED	PERM DISABLED	TEMP DISABLED	TITLE III	TOTAL	NON-DISABLED	PERM DISABLED	TEMP DISABLED	TITLE III	TOTAL
16	0	1	0	0	1	0	3216	0	0	3216
17	0	1	0	0	1	0	16764	0	0	16764
18	0	0	13	0	13	0	0	4115	0	4115
19	0	5	78	0	83	0	3538	3739	0	3727
20	0	21	280	0	301	0	3017	3528	0	3492
21	0	78	614	0	692	0	2598	3607	0	3493
22	0	165	822	0	987	0	2302	3726	0	3488
23	0	313	894	0	1207	0	2570	3813	0	3490
24	0	444	865	0	1309	0	2567	4035	0	3537
25	0	632	725	0	1357	0	2888	4096	0	3534
26	0	833	641	0	1474	0	2833	4461	0	3541
27	0	933	545	0	1478	0	2938	4630	0	3562
28	0	1143	496	0	1639	0	2951	5014	0	3576
29	0	1206	413	0	1619	0	3019	5281	0	3596
30	0	1663	361	0	2024	0	2902	5456	0	3357
31	0	2133	285	0	2418	0	2820	5795	0	3171
32	0	2628	270	0	2898	0	2909	6040	0	3201
33	0	3009	244	0	3253	0	3208	7003	0	3493
34	0	2860	235	0	3095	0	3654	7030	0	3911
35	95	1942	156	0	2193	9011	4020	7469	0	4481
36	116	1785	121	0	2022	8356	4345	7504	0	4764
37	855	1724	137	0	2716	7714	4652	8707	0	5820
38	4431	1772	184	0	6387	7692	4959	8276	0	6951
39	9845	1535	196	0	11576	7834	5226	9236	0	7512
40	15154	1470	211	0	16835	8052	5806	9233	0	7871
41	20108	1397	185	0	21690	8207	5858	10201	0	8073
42	26104	1629	166	0	27899	8458	6132	11178	0	8338
43	32248	1757	151	0	34156	8821	6474	11423	0	8712
44	36499	1981	131	0	38611	9199	6682	11249	0	9077
45	39722	1983	114	0	41819	9499	6911	12635	0	9384
46	41786	2274	101	0	44161	9671	6959	14492	0	9731
47	42426	2607	118	0	45151	10247	7342	14929	0	10091
48	46002	3214	80	0	49296	10542	7127	15123	0	10326
49	48419	3876	75	0	52370	10676	7326	16205	0	10436
50	54217	4428	76	0	58721	10641	7380	17636	0	10404
51	53630	4627	60	0	58317	10687	7558	18447	0	10447
52	46394	4365	50	0	50809	10785	7927	21427	0	10550
53	39312	3883	45	0	43240	10599	7937	16725	0	10358
54	33075	3043	20	0	36138	10641	8689	22078	0	10483
55	32472	3001	13	0	35486	11098	9522	25174	0	10970
56	33673	3428	17	0	37118	11655	9936	28069	0	11503
57	33221	3855	15	0	37091	11992	10752	25392	0	11868
58	32847	4202	0	0	37049	12233	11032	0	0	12097
59	35613	5119	0	0	40732	12568	11287	0	0	12407
60	33934	5578	0	5018	44530	12710	11647	0	6315	11856
61	31926	5400	0	12879	50205	12636	11903	0	6425	10964
62	28349	5388	0	11498	45235	12665	12093	0	6667	11072
63	24103	4871	0	10018	38992	12658	12356	0	6776	11109
64	19807	4129	0	9097	33033	12644	12155	0	6953	11015
65	16807	3562	0	8163	28532	12474	12138	0	7235	10933
66	13555	2989	0	7025	23569	12255	11652	0	7637	10802
67	10807	2624	0	5782	19213	12247	11516	0	7774	10801
68	8910	1993	0	5352	16255	12397	11764	0	7630	10750
69	7873	1886	0	4965	14724	12499	12242	0	7454	10765
70	6987	1705	0	4541	13233	12313	11990	0	7313	10556

RETIRED MILITARY VALUATION DATA AS OF END FY 1980

(ALL DOD)

	STRENGTH					AVERAGE ANNUAL NET RETIRED PAY				
AGE	NON-DISABLED	PERM DISABLED	TEMP DISABLED	TITLE III	TOTAL	NON-DISABLED	PERM DISABLED	TEMP DISABLED	TITLE III	TOTAL
71	5820	1458	0	4079	11357	12547	12085	0	7020	10503
72	5351	1305	0	3772	10428	12618	11799	0	6660	10360
73	4679	1170	0	3400	9249	12530	11617	0	6557	10219
74	3772	1028	0	2931	7731	12435	12044	0	6771	10236
75	3216	895	0	2337	6448	12681	11752	0	6662	10370
76	2796	801	0	2063	5660	12850	11785	0	6677	10449
77	2295	732	0	1761	4788	12937	11314	0	6599	10358
78	2007	636	0	1338	3981	12870	11563	0	6282	10447
79	1735	532	0	1046	3313	12579	11006	0	6574	10430
80	1546	519	0	941	3006	12454	11047	0	6547	10362
81	1254	446	0	811	2511	12035	10654	0	6609	10037
82	1004	412	0	683	2099	12651	11644	0	6703	10518
83	747	347	0	618	1712	13298	11939	0	6933	10725
84	593	265	0	552	1410	13243	11463	0	7217	10549
85	545	270	0	523	1338	13827	13562	0	7241	11219
86	413	227	0	448	1088	14185	13886	0	6924	11133
87	314	153	0	296	763	15038	14571	0	6900	11787
88	270	160	0	235	665	14525	15239	0	6809	11970
89	220	113	0	164	497	14802	15099	0	6525	12138
90	140	92	0	116	348	12859	15508	0	6800	11540
91	128	50	0	94	272	13042	14475	0	7211	11290
92	77	58	0	65	200	13262	15066	0	6474	11579
93	61	34	0	54	149	11942	17058	0	6152	11011
94	56	25	0	27	108	11968	17244	0	6518	11360
95	27	28	0	8	63	11558	16170	0	7959	13150
96	17	11	0	12	40	12764	10956	0	5257	10015
97	16	11	0	4	31	10982	14699	0	4716	11493
98	13	3	0	4	20	9831	18708	0	4758	10148
99	4	3	0	1	8	16814	29460	0	9184	20228
100	4	3	0	1	8	11409	6960	0	3300	8727
101	17	2	0	1	20	10829	3946	0	4596	9394
102	20	1	0	1	22	13759	8064	0	5748	13136
103	21	1	0	2	24	11645	4992	0	5148	10827
104	36	4	0	4	44	9988	5538	0	6087	9229
105	20	3	0	0	23	10727	7252	0	0	10274
106	24	2	0	5	31	11845	5934	0	6454	10594
107	26	1	0	4	31	10913	10500	0	3642	9962
108	37	1	0	3	41	9493	6876	0	6452	9207
109	34	1	0	1	36	8556	15000	0	4548	8624
110	8	0	0	1	9	9066	0	0	6444	8775
TOT	1000685	140893	10203	112744	1264525	10938	8768	6235	6934	10301
65+	104302	26562	0	64234	195098	12489	11912	0	7154	10654

NOTE: AGE IS RETIREE'S CURRENT AGE TO NEAREST BIRTHDAY AT END OF FISCAL YEAR.
65+ IS TOTAL AGE 65 AND OVER.
FIGURES ADJUSTED TO BUDGET.

DMDC - DOD ACTUARY'S OFFICE

APPENDIX D

Table 1

Comparison of Active Military Totals by Source, Category, and Date

As of Date and Source

Category	September 30, 1976			September 30, 1977			September 30, 1978			September 30, 1979	
	DMDC 1/	WHS 2/	Budget 3/	DMDC 1/	WHS 2/	Budget 3/	DMDC 1/	WHS 2/	Budget 3/	DMDC 1/	WHS 2/
Officers	[illegible]	279,397	[illegible]	275,941	275,956	274,993	274,011	274,275	273,316	273,830	274,129
Army	98,275	[illegible]	97,876	97,711	97,738	97,255	97,582	97,745	[illegible]	97,449	97,381
Navy	[illegible]	[illegible]	62,390	63,312	63,312	63,114	62,639	62,639	[illegible]	62,127	62,384
Marine Corps	18,667	18,647	18,581	18,566	18,650	18,584	18,326	18,308	[illegible]	18,124	18,229
Air Force	99,244	99,262	99,059	96,252	96,256	96,040	95,464	[illegible]	95,242	96,130	96,135
Enlisted	[illegible]	1,791,136	1,791,133	1,734,657	1,785,173	1,795,173	1,773,867	1,775,021	[illegible]	1,739,402	1,740,250
Army	680,007	680,077	680,074	680,033	680,062	680,062	669,333	669,515	669,513	655,978	657,194
Navy	459,707	460,231	460,231	461,571	462,176	462,176	462,276	463,217	463,217	456,300	457,102
Marine Corps	171,216	171,204	171,204	173,179	173,057	173,057	172,411	172,427	172,427	166,971	167,021
Air Force	479,624	479,624	479,624	469,874	469,878	469,878	469,847	469,847	469,862	458,953	458,953

1/ Based upon Defense Manpower Data Center Active Master Files for these periods.
2/ Based upon Washington Headquarters Services Report P26.0 for these periods with cadet excluded.
3/ Based upon the Presidents' Budgets for Fiscal 1978, 1979, 1980, and 1981 with cadets included.

Table 11

ACTIVE DECREMENT RATE FORMULAS

WITHDRAWAL FROM ACTIVE DUTY (by completed years of service)

$$\frac{\text{withdrawals during year}}{\text{number at beginning of year}}$$

ACTIVE DEATH (by age nearest birthday)

$$\frac{\text{deaths during year}}{\text{number at beginning of year} - 1/2\ \text{withdrawals and nondisability retirees during year}}$$

NONDISABILITY RETIREMENT (by completed years of service)

$$\frac{\text{new retirees during year}}{\text{number at beginning of year}}$$

TEMPORARY DISABILITY RETIREMENT (by completed years of service)

$$\frac{\text{new temporary disabilities during year}}{\text{number at beginning of year} - 1/2\ \text{withdrawals and nondisability retirees during year}}$$

PERMANENT DISABILITY RETIREMENT (by completed years of service)

$$\frac{\text{new permanent disabilities from active duty}}{\text{number at beginning of year} - 1/2\ \text{withdrawals and nondisability retirees during year}}$$

TRANSFER RATES (by completed years of service)

$$\frac{\text{transfers to category during year}}{\text{number at beginning of year} - 1/2\ \text{withdrawals and nondisability retirees during year}}$$

REENTRY RATES (by completed years of service)

$$\frac{\text{number re-entering year}}{\text{number at beginning of year}}$$

Table III
Summary of Graduation Techniques Used

Rate	Category	Ages or Lengths of Service	Technique
Death	All Enlistee	Ages 17-60	WH2
	All Officer	Ages 19-60	WH2
Temporary Disability Retirement	Regular Enlistee	Under 17 years	WH3
		17-19	Ungraduated Rates
		Over 19	WH2
	Nonregular Enlistee	Under 17 years	WH3
		17-20	Ungraduated Rates
		Over 20	Ungraduated (all zeroes)
	Regular Officer	Under 17 years	WH2
		17-18	Ungraduated Rates
		Over 18	WH2
	Nonregular Officer	Under 17 years	WH2
		17-21	Ungraduated Rates
		Over 21	WH2
Permanent Disability Retirement	Regular Enlistee	Under 17 years	WH3
		17-18	Ungraduated Rates
		Over 18	WH3
	Nonregular Enlistee	Under 17	WH2
		17-20	Ungraduated Rates
		Over 20	Ungraduated (all zeroes)
	Regular Officer	Under 17	WH2
		17-18	Ungraduated Rates
		Over 18	WH2
	Nonregular Officer	Under 17	WH2
		17-19	Ungraduated Rates
		Over 19	WH3

Table III (Continued)
Summary of Graduation Techniques Used

Rate	Category	Ages or Lengths of Service	Technique
Transfer to Regular Enlistee	Nonregular Enlistee	All	WH3
	Regular Officer	Under 25 years	WH3
		25 or more	Ungraduated Rates (zeroes)
	Nonregular Officer	Under 3 years	Ungraduated Rates
		3-19	WH2
		Over 19	Zero
Transfer to Nonregular Enlistee	Regular Enlistee	Under 28 years	WH2
		28 or more	Ungraduated (zeroes)
	Regular Officer	Under 4 years	WH2
		4 or more	Ungraduated (zeroes)
	Nonregular Officer	Under 20 years	WH2
		20 or more	Zeroes
Transfer to Regular Officer	Regular Enlistee	1, 2 and over 24 years	Zeroes
		Elsewhere	WH3
	Nonregular Enlistee	Under 20 years	WH3
		20 or more	Ungraduated (zeroes)
	Nonregular Officer	Under 7	Ungraduated rates
		7-36	WH2
		Over 36	Ungraduated (zeroes)
Transfer to Nonregular Officer	Regular Enlistee	Under 28	WH3
		28 or more	Ungraduated (zeroes)
	Nonregular Enlistee	Under 5 years	Ungraduated Rates
		5-9	Graphically Smoothed
		10-18	WH3
		Over 18	Ungraduated (zeroes)
	Regular Officer	0, 1, 4, 5, 18-21	Ungraduated rates
		Elsewhere	WH3

Table III (Continued)
Summary of Graduation Techniques Used

Rate	Category	Ages or Lengths of Service	Technique
Nondisability Retirement	Regular Enlistee	Under 18 years	Zero
		18, 29	Ungraduated Rates
		Elsewhere	WH2
	Nonregular Enlistee	Under 18 years	Zero
		18	Ungraduated Rate
		Over 18	WH2
	Regular Officer	Under 18 years	Zero
		18,28-30	Ungraduated Rates
		Elsewhere	WH3
	Nonregular Officer	Under 18 years	Zero
		18, 28-29	Ungraduated Rates
		Elsewhere	WH3
Other Losses	Regular Enlistee	Under 7 and over 16 years	Ungraduated Rates
		7-16	WH2
	Nonregular Officer	Under 4 and over 15 years	Ungraduated Rates
		4-15	WH2
	Regular Officer	Under 2 and over 11 years	Ungraduated Rates
		2-11	WH3
	Nonregular Officer	Under 4 and over 18 years	Ungraduated Rates
		4-18	WH3

Table III (Continued)
Summary of Graduation Techniques Used

Rate	Category	Age [1] or Length of Service [2]	Technique
Reentry Rate	Regular Enlistee	Under 18	WH2
		18-36	WH2
	Nonregular Enlistee	0-16	WH3
		17-20	Ungraduated rates
		21-35	WH2
	Regular Officer	Under 5	Ungraduated rates
		5-19	WH3
		20-39	WH2
	Nonregular Officer	Under 6, 19	Ungraduated rates
		6-18	WH3
		20-40	WH2

WH2: Whittaker-Henderson second differences
WH3: Whittaker-Henderson third differences

APPENDIX E

Table I

Military Retirees in Current Pay Status by Source by Branch of Service, Officer/Enlisted and Type of Retirement September 30, 1978, 1979, 1980

	1978		1979		1980	
Item	DMDC*	Budget**	DMDC*	Budget**	DMDC*	Budget**
Nondisabled Army Officers	132,301	132,015	138,237	137,957	143,645	143,587
Nondisabled Army Enlistees	205,127	205,408	211,764	212,039	217,956	218,182
Nondisabled Navy Officers	72,431	72,402	75,095	75,095	77,806	77,788
Nondisabled Navy Enlistees	205,003	204,879	209,609	209,609	215,228	215,201
Nondisabled M.C. Officers	13,917	13,911	14,820	14,826	15,765	15,768
Nondisabled M.C. Enlistees	33,695	33,702	34,508	34,500	35,425	35,415
Nondisabled A.F. Officers	98,601	98,535	104,114	104,196	109,894	109,981
Nondisabled A.F. Enlistees	277,666	277,640	287,981	287,907	297,873	297,507
Disabled Army Officers	29,361	29,378	28,626	28,633	27,989	27,985
Disabled Army Enlistees	33,643	33,631	34,156	34,154	35,160	35,144
Disabled Navy Officers	9,074	9,047	8,852	8,852	8,609	8,607
Disabled Navy Enlistees	21,684	21,385	21,222	21,222	20,965	20,951
Disabled M.C. Officers	3,076	3,078	3,043	3,048	3,012	3,017
Disabled M.C. Enlistees	10,147	10,135	10,056	10,044	10,069	10,059
Disabled A.F. Officers	17,467	17,467	17,193	17,201	16,835	16,829
Disabled A.F. Enlistees	29,442	29,442	29,160	29,211	28,515	28,504

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*Based upon magnetic tape files submitted from the Service Finance Centers to the Defense Manpower Defense Center.

**Based upon actual accounting reports sent from the military Services to the Comptroller's office (Reports Control Symbol: DD-COMP(M)897).

Table 11

Percent of Cases
Where Needed Data Elements Were Unknown

Type of Retirement	Grade	Data Element	Percent Unknown FY79	Percent Unknown FY80
All	All	Type of Retirement	0.04	0.04
Temporary Disability	All	Grade	0.00	0.00
	Officers	Age	7.06	6.58
		Status at End of Fiscal Year	2.38	1.88
		Years Retired	2.98	1.50
	Enlistees	Age	8.68	9.87
		Status at End of Fiscal Year	2.97	3.06
		Years Retired	0.96	0.87
Permanent Disability	All	Grade	0.01	0.01
	Officers	Age	0.32	0.37
		Status at End of Fiscal Year	0.32	0.06
	Enlistees	Age	0.83	0.90
		Status at End of Fiscal Year	0.38	0.13
Nondisability	All	Grade	0.00	0.00
	Officers	Age	1.14	1.23
		Status at End of Fiscal Year	0.14	0.04
	Enlistees	Age	1.91	1.93
		Status at End of Fiscal Year	0.15	0.05

Table III

Proportion of the Change

Type of Retirement and Ggrade	Fiscal 1979 Age Known	Fiscal 1979 Age Unknown	Fiscal 1980 Age Known	Fiscal 1980 Age Unknown
Temporary Disability				
Officer	.90	.89	.90	.90
Enlistee	.82	.85	.82	.88
Permanent Disability				
Officer	.97	.98	.97	.96
Enlistee	.95	.93	.96	.95
Nondisability				
Officer	.98	.99	.98	.99
Enlistee	.98	.99	.98	.99

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*This table gives the proportion of retirees in paid status at the beginning of the fiscal year who were still in paid status at the end of the fiscal year.

Table IV

Comparison of Deaths by Source After Allocating Unknowns for Permanent Disability and Nondisability Retirees

	Officers				Enlistees			
	Fiscal 1979		Fiscal 1980		Fiscal 1979		Fiscal 1980	
Type of Retirement & Branch of Service	DMDC*	OSD**	DMDC*	OSD**	DMDC	OSD**	DMDC*	OSD**
Permanent Disability								
Army	900	904	854	851	608	581	680	670
Navy	268	291	311	337	327	496	383	570
Marine Corps	59	61	53	57	110	219	72	185
Air Force	409	408	422	NA	527	526	519	NA
Nondisability								
Army	2588	2614	2871	2866	2830	2875	3227	3221
Navy	1415	1410	1598	1523	2399	2500	2597	2862
Marine Corp	177	187	188	201	333	356	380	439
Air Force	1107	1095	1223	NA	2243	2216	2439	NA

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*Based upon magnetic tape files submitted from Service Finance Centers to the Defense Manpower Data Center.

**Based upon actual accounting reports sent from the military Services to the Office of the Assistant Secretary of Defense (Comptroller), Reports Control Symbol: DD-COMP(M)897.

Table V

RETIREE DECREMENT RATE FORMULAS

DEATH OF NONDISABILITY RETIREES (by age nearest birthday)

$$\frac{\text{Nondis deaths}}{\text{Number at beginning of year} - 1/2\ (\text{Nondis deaths} + \text{other nonVA losses})}$$

DEATH OF PERMANENT DISABILITY RETIREES (by age nearest birthday)

$$\frac{\text{Perm disability deaths}}{\text{Number at beginning of year} - 1/2\ (\text{Perm dis deaths} + \text{other nonVA losses})}$$

DEATH OF TEMPORARY DISABILITY RETIREES (by age nearest birthday and years retired)

$$\frac{\text{Temporary disability deaths in category*}}{\text{Number at beginning of year} - 1/2\ (\text{Deaths} + \text{transfers} + \text{nonVA losses})}$$

RATES OF NONDEATH, NONTRANSFER, NONVA LOSS FROM NONDISABILITY (by age nearest birthday and years retired)

$$\frac{\text{Nondeath, nontransfer, nonVA losses}}{\text{Number at beginning of year}}$$

RATE OF NONDEATH, NONTRANSFER, NONVA LOSS FROM PERMANENT DISABILITY (by age nearest birthday and years retired)

$$\frac{\text{Nondeath, nontransfer, nonVA losses}}{\text{Number at beginning of year}}$$

RATES OF NONDEATH, NONTRANSFER, NONVA LOSS FROM TEMPORARY DISABILITY (by age nearest birthday and years retired)

$$\frac{\text{Nondeath, nontransfer, nonVA losses}}{\text{Number at beginning of year}}$$

RATES OF TRANSFER FROM TEMP TO PERMANENT DISABILITY (by age nearest birthday and years retired)

$$\frac{\text{Transfers to permanent}}{\text{Number at beginning of year}}$$

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*Includes deaths that were temporarily disabled at beginning of year, transferred to permanently disabled, then died during that same year.

Table VI

Summary of Graduation Techniques Used to Create Permanent Disability and Nondisability Retiree Decrement Rates

Rate	Category	Ages	Technique*
Death	Permanent Disability		
	Officers	28 - 81	WH3
		Elsewhere	LP
	Enlistees	20 - 81	WH3
		Elsewhere	LP
	Nondisability		
	Officers	38 - 81	WH3
		Elsewhere	LP
	Enlistees	39 - 81	WH3
		Elsewhere	LP
"Other Loss"**	Permanent Disability		
	Officers	50 - 80	WH3
		Elsewhere	Set to Zero
	Enlistees	20 - 88	WH3
		Elsewhere	Set to Zero
	Nondisability		
	Officers	38 - 53	WH3
		54 - 93	WH3
		Elsewhere	Set to Zero
	Enlistees	35 - 53	WH3
		54 - 94	WH3
		Elsewhere	Set to Zero

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*WH3 = Whittaker-Henderson with third differences.

LP = Linear projection at the logarithms of the graduated values.

**"Other Loss" means all losses except death and VA waiver.

Table VII

Summary of Graduation Techniques Used for Temporary Disability Decrement Rates

Rate	Group	Years Retired	Age*	Technique**
Transfer to Permanent Disability	Officers	0	25-59	WH2
		1	25-59	WH2
		2	27-59	WH2
		3	28-59	WH2
	Enlistees	0	18-59	WH3
		1	19-59	WH3
		2	20-59	WH3
		3	21-59	WH3
Other Loss***	Officers	0	25-48	WH2
		1	25-51	WH2
		2	27-51	WH2
		3	28-59	WH2
		4	26-58	WH2
	Enlistees	0	18-52	WH2
		1	19-57	WH2
		3	21-55	WH3
		4	22-59	WH2

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*Rates for ages outside these ranges were created by extending or projecting or projecting the rates at the end points.

**WH2 = Whittaker-Henderson with second differences.
WH3 = Whittaker-Henderson with third differences.

***Other Losses include all losses other than death, VA waiver, and transfer to permanent disability retired status.

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